

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

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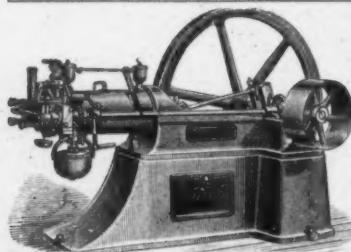
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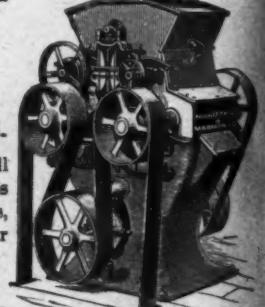
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MANUFACTURERS' RECORD

A Southern Industrial, Railroad and Financial Newspaper.

VOL. XVII. NO. 10.
WEEKLY.

BALTIMORE, APRIL 12, 1890.

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BALTIMORE, APRIL 12, 1890.

A convention of Northern men living in the South will be held at Douglasville, Georgia, next May. Referring to it an exchange says:

An address by Northern men living in the South will do more to convince the North that the Southern States are prosperous and peaceful than all the newspapers could say in a lifetime.

To a certain extent we agree with the foregoing. A convention similar to that proposed was held in Raleigh, N. C., several years since, which was largely attended. It was in session two days, during which time several "experience meetings" were held. The thousands of Northern settlers in that State, by their accredited delegates, testified that "the lines" had "fallen to them in pleasant places," that they had "a goodly heritage." Strong resolutions were adopted. Full reports of the proceedings were printed by the State Department of Agriculture, and many thousand copies were distributed in the North and West. North Carolina has felt the benefit of this voluntary act of its Northern-born citizens ever since.

But what that State then did was but "a drop in the bucket." Every Southern State should send delegations of its Northern born citizens to some great central point like An-

ton, Atlanta, Chattanooga, Nashville, Columbia, Charlotte or Norfolk to hold a convention of the kind proposed. The meeting at Douglasville will do good, but of a limited character. To accomplish the great purpose that every true Southerner has at heart, the convention should be held where there are large daily papers, where the Associated and United Press have resident representatives, and where the people have not only the enterprise but the means to entertain handsomely several hundred representative men from all the Southern States. Such a convention would command the attention of political leaders, of the entire press, and of the capitalists, the home-seekers, and the enterprising men of the North.

The daily discoveries of valuable iron deposits in the South, and the lack of any book containing a complete directory of all that are known with authentic statements as to their areas, their estimated stores of ore and the diverse qualities of the same, have created a large inquiry for some reliable and explicit publication. The man that will get up a report of the minerals of the Southern Appalachian region, with accurate statistics of all the enterprises, old and new, engaged in their development, at the same time showing where others may be started to advantage, will find a large sale for such a work. There are plenty of materials that may be secured to assist in its compilation, such as the data in the office of the United States Geological Survey and in the geological reports of the several States, also in the files of the MANUFACTURERS' RECORD for the past eight years, to which access will be cheerfully given, and, finally, there will be a vast amount of accurate statistics obtained by the experts of the Eleventh Census. Whoso will undertake this work and do it honestly and thoroughly will gain profit and reputation from it.

An Example Worth Following.

Manchester, N. H., is a city of wonderful growth and the most brilliant prospects; metropolis of New Hampshire and commercial capital of the State; the trading center for nearly 100,000 people; a city which is prospering and which is bound to prosper; a city which owns its superb system of water works, the rentals from which more than pay the interest on the city debt; a city which has more than doubled its population and valuation within the last twenty years; a city which is the home of the largest textile manufacturing corporation in the world; a city whose wage-earners are paid more than \$100,000 every week; a city where it is the policy of the city government to exempt new enterprises from taxation for a period of years, and where individuals stand ready to donate desirable sites for manufacturing purposes; a city free from labor troubles; a city which spent more than \$2,000,000 in building operations in 1889; a city populated by a busy, thrifty and progressive people; a city of health and contentment.

The foregoing is worth reading. It is an advertisement put into the leading New England papers by the Manchester Board of Trade and signed by its secretary, who says: "The capitalist can find no more desirable spot for the investment of his money." He also invites correspondence.

If the Board of Trade of that old New Hampshire town were like some others we wot of, it would never have had the enterprise to advertise in this or in any other form. Its conservative and presumably pompous leader—had some younger and enthusiastic member ventured to propose advertising the city—would have risen from his seat with great dignity, and, addressing the chair, would have said: "Sir, this is a preposterous proposition, and unworthy of serious consideration. We must pardon the maker of the proposition for his presumption because of his youth and inexperience."

Then the magnate of the board would have taken his seat, the resolution would have been indefinitely postponed, and the representative of Young America would have been sat upon heavily enough to keep him silent for the future.

But in those thriving New England manufacturing towns they don't allow their beards of trade to be ruled by pompous old fogies. They bring into them the brightest and brainiest business men in their communities, and whoever has the gift of leadership is put to the front. That is one cause of New England's pre-eminence in manufacturing.

In several respects the example of Manchester is worth following:

First. In advertising the advantages of the city as a business center.

Second. In exempting new enterprises from taxation for a period of years.

Third. In donating desirable sites for manufacturing purposes.

There are many cities and towns in the South that do none of these things, that might adopt them all with great gain to themselves. In most of these are active and energetic young business men who do not make their influence felt because they have no organization of their own through which they can unite in influencing public action. In all such places we advise young men to band themselves together for their own good and for the progress of their city, instead of waiting until the old fogies "depart in peace" and leave the field in their possession.

RAILROAD transportation tells the story of Southern progress. Such in brief is President Depew's view, and as the head of one of the greatest railroad systems of the North, he speaks as an expert. The interview with that gentleman, which is published elsewhere in this issue, contains much of interest, but has no more striking feature than that to which we have referred.

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Southern Loyalty.

There are among the people of the United States those who cannot yet believe that the South is as true to the Union, as devoted to the Constitution, as they are themselves. The number of these uninformed people decreases daily, but there are so many remaining who require education on this line, that it is necessary for those who understand the South to give from time to time some of the numerous facts that are of continual occurrence that will enlighten our misguided Northern friends.

One of the most recent instances of Southern love for the Union and respect for the country's flag occurred in the old and very conservative town of Yorkville, South Carolina, whose people last year built a large graded school, and provided it with a principal and a corps of teachers.

The first anniversary of the opening of this institution was celebrated some two weeks since by the hoisting of the United States flag over the building with appropriate ceremonies. The flag and staff used were purchased with money raised by the volunteer contributions of Yorkville's citizens.

The Yorkville Enterprise gives the following account of the proceedings:

A number of visitors were present in the large and commodious chapel at eleven o'clock, when, to the soul-inspiring tune of Dixie, the pupils of the school marched into the hall and took the seats assigned them. They were followed by the teachers, who took seats in the rear of the hall. Prof. Thackston then announced, as the first event upon the programme, the original thirteen States represented by thirteen little boys and girls, who gave a short history of the organization of the different States which they represented, and afterwards took their places in front of the rostrum. At the conclusion of this an extract, "The American Flag," was rendered most happily by Miss Edith Wallace. The committee in charge of the programme made a happy selection when they procured the services of General Law to make the presentation speech. Prof. Thackston then escorted General Law to the rostrum, and the subject which had been assigned him seemed to inspire him for his most appropriate and well-delivered remarks.

In the beginning he said that it was our duty to teach the rising generation the history of our flag, as the history of a country's flag was the history of a country itself. The American banner originally represented thirteen weak States; now forty-three States graced its bars and represented that number of great Commonwealths. There was a time when these stars were divided and the flag bathed in blood, but that time was past, and the stars and bars was the winding sheet of buried hopes and expectations, and now the North, South, East and West vied with each other in honoring the banner of a re-united and undivided country.

The flag was then presented and delivered to Prof. Thackston, and Mr. Jos. F. Wallace accepted it on behalf of the school.

The "Star-Spangled Banner" was then beautifully rendered by Asbury Coward, Jr. Rev. L. A. Johnson, who was present, was then called upon, and in his usual impressive style delivered an appropriate address.

This concluded the exercises in the chapel, and the crowd repaired to the front of the building and witnessed the hoisting of the banner, which was given three cheers as it unfolded to the gentle breeze.

For the information of our Northern exchanges and readers it may be stated that the eloquent presentation address was made by Gen. E. M. Law, the commander of the South Carolina brigade in the Army of Virginia that was famous for its fighting qualities. The flag was accepted in behalf of the school by a gallant ex-Confederate, and the fathers of the children who respectively recited "The American Flag" and "The Star Spangled Banner" were colonels of South Carolina infantry regiments during the late unpleasantness. Bear in mind that this was a home affair. No effort was made to give it publicity. It was simply a voluntary expression of the innate Americanism of the people of Yorkville, S. C.—"only that and nothing more," so far as they were concerned, but in a broader sense it was significant of the loyalty of the South to the Union, the Constitution and the flag.

No disasters can daunt the courage of the South—Louisville, through whose wholesale business blocks the tornado carried death and desolation, has risen to the height of the emergency, and asking no aid from the outside world, is relieving the sufferers of the calamity and rebuilding the broken-down places.

The spirit of the South is well interpreted in these bold words of the Nashville American:

Just at present the South is being visited by flood as well as by storm. The waters all along the course of the mighty Mississippi from the time it crosses Mason & Dixon's line, have swollen beyond the banks of the great river and are devastating towns, destroying property and life, and evolving germs of malignant disease. Tennessee and Arkansas, Missouri and Louisiana and Mississippi are especially afflicted. Here the boundless waters continue to hold high carnival, and death and want are the doom of many thousands.

But though we are busy just now throttling epidemics and escaping the terrible visitations of Providence, we are still full of vigor and enthusiasm. We will take care of our afflicted, bury our dead, and be ready for the great battle of progress which we have so earnestly begun.

Nothing can now daunt the people of the South. Our destiny is right ahead of us, and it is a glorious one. We do not propose to let the storm and water more than check us. We have set out to build a future that will delight our posterity, and despite all the annoyances of the character we are now encountering that future will be duly built.

This is true American grit, which is sure to surmount all difficulties and to triumph over all disasters.

MAJOR GOLDSMITH BERNARD WEST, who for the past nine months has been in command of the MANUFACTURERS' RECORD'S Exploring Expedition, traveling through the undeveloped mineral and timber regions of the Southern States and writing valuable and interesting descriptions of them, has become so impressed with the natural resources and advantages of Calhoun county, Ala., that he has resigned his command to become manager of the Jacksonville Land, Mining & Manufacturing Co. of that county.—Bulletin of the American Iron & Steel Association.

FURNACEMEN will obtain a valuable hint from the following clipping from a late issue of the Iron Trade Review:

An experiment was tried at the Crown Point Iron Co.'s plant, some time ago, on the occasion of their re-lining and starting in blast one of their large furnaces. After the fire-brick were in place, a cheap article of graphite or plumbago was bought, reduced to a paste with water and the interior of the furnace washed with the plumbago paste. It gave a slippery glaze—incident to the lubricating quality of the plumbago—to the fire-brick lining, which, lessened the time necessary to a heat quite a percentage. The slippery surface refused to be coated with slag or other refuse, and the charge passed down in less time and left the lining free and clear. The Crown Point managers claim quite a success for their scheme. The expense of the trial was very small compared with the value of the results.

Everybody knows that graphite crucibles are universally used, and for the very reasons that this coating was tried. It would scarcely seem as if an experiment was necessary to demonstrate in the furnace what had been proven for generations by the crucible. The general adoption of this graphite coating would create a new market for the coarser grades of that mineral that are found in many parts of the South in near proximity to iron mines.

THE high appreciation of Southern securities at the North is evidenced by the recent sale of \$200,000 five per cent. thirty-year bonds of the city of Birmingham, Alabama. They were bought by Blake Bros., of Boston, who paid \$104.55 for them, which was equivalent to \$120 for a six per cent. bond. If the present rate of Southern progress continues it will not be long before the Northern States will amend their savings bank laws by adding to the lists of States and towns whose bonds banks of that kind are authorized to buy, the names of many of the prospering cities of the South.

Good Example for Some Southern City to Follow.

The St. Paul (Minn.) Industrial Union has developed a gigantic scheme to bring manufacturing establishments to that city. The joint stock of the union is to be \$1,000,000, each member to take shares to the extent of \$5,000, payable in installments of 2 per cent. per month, thus insuring the payment of the entire \$1,000,000 in 50 months. Fifty men have already pledged themselves to take \$5,000 each. This \$1,000,000 capital will not only be used to buy stock in worthy manufacturing enterprises which are establishing here, but will be loaned to concerns already established which need assistance to carry them on to success. This will illustrate the plan of loaning: B is a manufacturer, and wants a loan of \$5,000. The money is furnished him, and he gives bonds for the payment. These bonds are put up for sale to the members of the union, and the highest bidder takes them, and thus relieves himself and the union from a double liability.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South cannot find a better medium than the MANUFACTURERS' RECORD.

THE SOUTH**As Seen by Chauncey M. Depew.****Its Progress, Opportunities, Prospects and Drawbacks.**

It is known to all men that Doctor Chauncey M. Depew, president of the New York Central system, an eminent political leader, a versatile scholar, and an orator of international fame, has recently visited Florida and some other Southern States. The views of a man of such mental calibre, executive power and commanding financial, social and political influence will always be received with respect. Because of this, the MANUFACTURERS' RECORD detailed one of its staff with instructions to meet Mr. Depew on the Washington and New York express train, and to obtain for publication whatever that gentleman might choose to say concerning that section of the South through which he has recently passed.

Upon presenting his card the MANUFACTURERS' RECORD's representative was invited into the cosy sitting-room of President Depew's car and received a cordial greeting from its owner, who, after learning the object of the caller, said that he should be happy to oblige the MANUFACTURERS' RECORD, but that as his trip had been for health and recreation, and his time had been mainly occupied in their pursuit, what he had seen and noted of the industrial progress of the South was too little to justify him in saying very much on that subject. As a result of his journey he had, however, become much more hopeful of the South's future than he was after returning from his first excursion. Then he went down by the Atlantic Coast Line, and passed through several hundred miles of country, most of which, judging by what he saw from the car windows and from the platforms of stations, was in a forlorn condition. There was little appearance of thrift or energy, or of patient, brain-guided industry. It looked as if the people, whites and blacks alike, had no ambition to better their condition, and as though the whole country was given over to decay.

This time he has found a very different spirit prevailing, and, while in the eastern lowlands of the Carolinas he did not find as many signs of advancement as elsewhere, yet there was enough to satisfy him that the spirit of progress was aroused, and that in time the influences flowing from the great industries and enterprises to which the people of the Appalachian districts were devoting themselves with tireless energy would spread through all these regions, from the mountains to the sea, and cause them to be what the Almighty intended they should be—populous and prosperous. The one serious drawback to general progress and prosperity in most of the South was that too much time and thought were given to politics to the neglect of other matters of grave importance.

If these people could only make up their minds to give to business development three-fourths of the brains and energy they now bestow upon politics, the good effect would soon be manifest in improvements in all lines of business, and at the same time many things in their civil and social conditions that they now look upon as dangers to be guarded against, they would then find to be for the most part the bugbears of their own imaginations.

St. Augustine, Florida, was Mr. Depew's destination when he left New York, and of that city and State he spoke in most glowing terms. In the glorious atmosphere of St. Augustine "la grippe" quickly disappeared, and his usual health and vigor were restored. He took various journeys in that great State, and became much

impressed with its resources. It can be converted into an agricultural paradise, and it will be before long, in Mr. Depew's opinion. Among the many reasons for his confidence in the future of Florida were several of convincing force. When the war ended the State had a comparatively small and widely scattered population. Even now, with all the increase of twenty-five years, but a small part of the great area is occupied. Yet in Florida an orange plantation of twenty acres, taking the average crops for a series of years, will give larger returns to its owner, with far less outlay for labor, than a farm of a hundred acres in any other part of the country. Mr. Depew mentioned various instances of which he had personal knowledge, of the success of Northern men of moderate means who had settled there. One of these was that of a man who bought a small farm, built his house upon it, expended \$2,500 in sinking an artesian well and in laying porous water pipes near the surface. On this land he cultivated early vegetables, and the net cash proceeds of his first year's crop repaid in full his entire investment. "Now," said Mr. Depew, "these are not isolated cases. You can find others equally convincing wherever you go. Let our young men who are going to the far West in great numbers every year in search of homes once realize what Florida is, that its steadily increasing population is flowing in from the North and not from Europe, and that it is destined to be a purely American Commonwealth, and they will flock that way. Every season some forty train-loads of young men and their wives leave Iowa and other States of the Northwest to buy cheap farms on the Pacific slope. If they knew what advantages Florida had they would assuredly go there instead of to the farther West."

The discovery of immense phosphate deposits was already bringing a great deal of capital into the State, and the development of that industry would eventually be of as much value to it as it has been and continues to be to South Carolina."

With Atlanta and other cities in North Georgia, North Alabama and East Tennessee, Mr. Depew was greatly pleased. They were substantial and indisputable proofs that the term, New South, was not a rhetorical name, but a solid reality. To find a city of nearly a hundred thousand people where in 1865 were nothing but the chimneys and debris of a war-ruined town, and to see there all the accompaniments of our advanced American civilization was a great gratification to Mr. Depew. At the Gate City first, at Chattanooga later, and at various places in the Appalachian region, he saw the same energy, ambition and spirit of enterprise displayed that have changed the great West from a wilderness into prosperous Commonwealths. Their people are practical. They have found out the virtues of industry, thrift and enterprise, and are practicing them with all their might. When people give their attention to opening mines, building blast furnaces and booming town lots, they have little time or inclination for sentimental politics, and that is the present state of things in the Southern coal and iron districts. It is a healthful and hopeful condition, and all signs indicate that it will increase. "In no other part of the world, so far as I am informed," said Mr. Depew, "have coal, iron ores and limestone been found close together as they are in the South, and I see no reason, if the quality of the iron is all right, (a thing of which I have no personal knowledge,) why that section should not eventually supply the world with that metal."

The most convincing proof of the industrial progress of the South, to Mr. Depew's mind, was the enormous railroad traffic. "The railroad managers complain," said he, "and with some reason, I think, that they are not getting as much money as they

should for the enormous work they are doing; but the cause for that is that the business has grown much faster than they have been able to provide for its economical handling. They need more track, more sidings, more locomotives and more cars, and all these take time to provide, while production increases rapidly and continuously. Every new blast furnace adds largely to the demand for transportation facilities. Then there are all the saw mills and the factories of many kinds turning out lumber and goods that must be carried to market. These long lines of freight trains tell the story of the New South's industrial progress."

With Asheville and the mountain region of North Carolina and Tennessee Mr. Depew was delighted. "They have a corner on the atmosphere there which no one can take from them," he said. In his judgment Asheville is the forerunner of what is to be; he thinks the time is coming when all the beautiful and health-restoring locations of the Unaka, the Blue Ridge and their various ranges and spurs will be dotted over with health and pleasure resorts, with the villas of the wealthy and the homes of a thrifty and well-to-do people.

The foregoing is but a brief outline of the principal subjects which Mr. Depew discussed, but enough has been given to show what impressions the South made upon his acute and receptive mind.

Injustice of the Conger Bill.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

LITTLE ROCK, ARK., April 2, 1890.

The ideas you have inaugurated on the subject of cotton-seed oil and its uses certainly meet with the approval of every one connected with the business, and should interest the whole South, whose interest in its manufacture extends throughout its entire area. Whatever causes affect its interest affect to a degree the producer of the raw material, cotton-seed. We are aware that all business and manufacturing interests are affected at certain periods by natural causes that have a depressing influence on that business. The theorist and expounder of political economy each have their reasons for such depression, and each advances theories showing how recurrences of such can be clearly and safely avoided. Notwithstanding the teachings of these wise men, our country passes through periods or cycles of prosperity, culminating at the end of these years in upheavals in commercial and financial circles, in which all classes of business and all communities suffer. The effect of these normal causes are felt in the business of the manufacture of cotton oil in common with all others.

Of the results of these we do not complain, because they are natural. It is generally accepted that the prime cause for this congested condition of our affairs is due to over-production, or the defiant attitude we assume to the inexorable law of supply and demand. I do not mean to advocate the restriction of production, thereby nominally raising or depressing prices, the ultimate result of which we have seen demonstrated latterly in the attempted concentration of certain businesses, some of which are not far remote from that of which this article treats. To attempt to supply a remedy at this time is to attempt to change one of the natural laws, although many think Bellamy has solved the question.

The legislators of the country are elected by the people to protect the interests of that people by making laws that are equal and just, to pass such measures as are good for our whole people and to place all interests on an equality. When the interests of one business are affected by another in the course of legitimate competition, is it right or just that class legislation should be called in as an aid in the suppression of one for the protection of the other? This is precisely for what the several bills before

Congress are intended. It is the hog-producing interests versus the cotton-seed oil interests. Heretofore, large sums of money have been expended by those interested in defeating such measures.

The time has come for the question to be decided on its merits. The charge that cotton-seed oil as an adulterant for human food is deleterious to health is as vicious as it is untrue. Investigation as to its character has pronounced it to be a pure vegetable oil, free from any possibility of disease, and entirely fit and desirable for human food. The developments before the agricultural committee of Congress a year or two ago, in reference to the manner in which pure hog lard was manufactured, elicited facts that show such lard to be unwholesome and entirely unfit for human consumption. How are consumers to know that the hog lard they use is not made from diseased swine? The claim that the blending of pure vegetable oil with lard deteriorates it is simply absurd. To prohibit its use as a lard ingredient is to curtail temporarily its production, which will injure the business to an incalculable degree. The attempt to place compound lard containing cotton-seed oil under the internal revenue laws shows plainly the real object of the measures. If, as they claim, the product is deleterious as an article of human food, the manufacture of it as such should be suppressed. The mere placing of a tax on it will certainly not change its character. It is too obvious that the measures are not for revenue.

Should such iniquitous legislation prevail, the precedent it would establish would be a menace to all industries that are carried on within our borders, and the question may be asked, when or where will it stop? As well may the woolen manufacturers be placed under the restriction of internal revenue laws, because they use cotton as an adulterant in their fabrics, or perhaps the suppression of the production of cotton because it has become an adulterant may be in order. How would our free American people regard laws that would compel them to wear garments made wholly of cotton or wholly of wool?

With equal propriety measures could be passed compelling paper manufacturers to use the same kind of rags as those used by our forefathers, because that material at that time produced an article called paper; and still the modern manufacturer uses wood and straw, which produces practically the same thing, thus cheapening an article necessary for the people. Why should lard manufacturers be restrained from using wholesome and healthful material for producing lard or compound lard if they can reduce the cost so as to cheapen it for the masses?

It is indeed strange that the advocates of the bills have in the last year or two discovered that cotton-seed oil is an undesirable constituent of compound lard.

This channel has been the outlet for a large per cent. of the oil manufactured for many years, and has enlarged its manufacture more than any other, having been the chief factor in extending the business to its present proportions.

It is unreasonable to suppose that any manufacturing business can survive that is necessarily compelled to endure the changes and vicissitudes that come to it naturally, and also bear the double burden of hostile legislation. The amount of vitality required to withstand such is more than is possessed by this or any other business.

I trust that your efforts in behalf of cotton-seed oil may be the means of removing some of the prejudices now existing against it, and that the time will soon come when the whole people will regard it as an article eminently fitted for food purposes, and use it for what it is—a good, clean, wholesome vegetable oil.

J. J. CULBERTSON.

TREDEGAR.

Happenings in the Happy Valley of Alabama Vividly Portrayed by Maj. Goldsmith Bernard West.

TREDEGAR (P. O. JACKSONVILLE), ALA. }
April 7, 1890. }

With that charming naïveté for which I shall never cease to admire myself, I am the first to admit that what I write now, in the condition of being a rank outsider, will hardly have the weight with the MANUFACTURERS' RECORD readers that once obtained while I was a disinterested and struggling missionary. But it is possible that some of the constituency may be interested to know what is happening in this happy valley of ours, the fame of which it was my duty and privilege to spread in the days before I became personally interested in Tredegar and its industrial development.

The past week has been marked by great activity throughout the district. The Anniston sale and the widespread interest taken in Tredegar throughout the country, combined to bring along several hundred Eastern and Northern investors, and the consequence has been that the hotels of both towns have been crowded, while the offices of the Jacksonville Mining & Manufacturing Co. and of the Anniston City Land Co. have been pushed to their working capacity to meet the demands for investment. In addition to the attendance of people anxious to buy city property in Tredegar, a number of representatives of persons and syndicates proposing to start industrial plants here have been making their examinations and considering locations and facilities. The elements rather worked against Anniston, as during the successful sale there it simply rained cats and dogs with the tides downward so to speak, while at Tredegar the sun shone with its complete effulgence. Col. McKleroy and his associates of the Anniston City Land Co. deserve great credit for the complete order and organization which marked their auction of Anniston lots. A large number were taken by the visitors at full prices, notwithstanding the depressing effect of the weather, and everybody appeared pleased. Besides the Eastern and Northern contingent, Tredegar and Anniston have been visited by delegations from Middlesborough, Knoxville, Chattanooga, Louisville, Nashville, Birmingham, Montgomery, Mobile, New Orleans, and so on. This week I have advised that other parties are coming to Tredegar from a number of points, especially from Chattanooga and Middlesborough. There are here at present, among them Col. Phil McKay and Messrs. Joe Busby, G. H. Eastman and Louis F. Miller.

It had been our intention to withhold all property from sale until next month, but the pressure has been so continuous and strong from all directions that we have had to give in and allow the boys a chance to take a little interest in advance of any public sale. Everybody who comes here wants to buy and stay. Without exception everybody who has come has telegraphed all around to friends to come or to authorize investments by wire. Several of the Kentucky representation have decided on the spot to buy homes and settle down at once, and there is a remarkable degree of activity in spite of all our efforts to keep things quiet for the present.

One feature of our programme that seems to strike all visitors favorably is our reservation of a large sub-division of beautiful property especially for the laboring people who will be connected with the furnaces, rolling mill and other plants. At the southwest corner of the town we have a large tract of land, with fine drainage,

pure water and dotted with shade trees, upon which workingmen will be able to build and own homes, easily within their means, no matter what may be the market value of surrounding property. This industrial division will be immediately adjacent to the furnaces and factories.

Railway improvements are being pushed. The Blue Mountain Mineral is building and its completion is promised for August 1. There is a road already graded toward Gadsden, owned by our people, which will meet the Chattanooga Southern within the year, thus opening Tredegar to the Louisville & Nashville System. The gauge of the East & West Railway was widened to standard on Sunday as far as the Coosa river, and the work is to be completed this week. This will give increased carrying capacity, greatly to the advantage of our iron and manganese mines.

Among the industries to be established in Tredegar, a good deal of interest is being taken in the vitrified sewer and drain pipe works to be based on an exceptional clay found on our property. A New England enthusiast is anxious to put up a large shop for the production of whetstones from the Tredegar whetstone quarries. The prospects for the Boston-Tredegar Boot & Shoe Co. are excellent, and the Tredegar National Bank will open its doors for business week after next. I suppose there are any number of cotton mill people who read the MANUFACTURERS' RECORD, and if any of them should see this letter, it would afford me pleasure to receive a line from them on a matter of mutual importance. We can fix up all industries with sites, cheap ore lands and cheap everything else. We own thousands of acres of the richest timber, iron, limestone and manganese lands, held expressly to insure cheap facilities and raw material to manufacturing industries.

GOLDSMITH BERNARD WEST.

It Beats Banking.

What an Investment in Pine Timber and a Mill Has Yielded.

A very few years ago a gentleman settled in Lincoln, a small village a few miles from Anniston, says the Anniston News. He was in debt at the time and his prospect for worldly wealth was away below par. He had a capital of nerve, however, and set to work at whatever his eyes and his hands could find to do. In a few months he purchased an old saw mill on credit. The concern was not worth a great deal, therefore the "promise to pay" did not involve a large sum. It was all the world to this poor man, however, and he set to work with a will.

His experience in the saw mill business was limited, and for a time he was compelled to employ a sawyer. Finally he assumed that position himself, working like a Trojan day after day and month after month. The returns came in steadily, the business grew apace until a new mill became a necessity, and the owner, who had been sawyer and manager, hired a sawyer and devoted his entire time to the management. Then another mill was added. This was followed by the establishment of a lumber yard in Birmingham. With work and care this grew to be one of the largest institutions of its kind in that city, and now the man who started with a little old saw mill and a batch of debts on his shoulders is not only free of debt and independent, but buys more lumber than both his mills saw.

This man's career demonstrates that in this land of magnificent opportunities he who hustles and saves shall thrive.

P. M. JONES, Sheppards, Va., wants the address of dealers in hickory, spoke timber, etc.

CLAY CITY, KY.

The New Town on the Kentucky Union Railroad,

Whose President, F. D. Carley, of Louisville, Is One of the Foremost Promoters of Kentucky's Prosperity.

THE LAND SALE LAST WEEK.

[Spec. corresp'dence MANUFACTURERS' RECORD.]
CLAY CITY, KY., April 2, 1890.

Knowing that Clay City was a strategic point in the development of Eastern Kentucky I made it a point to spent a few hours here on the first day of the great sale of town lots.

Owing doubtless to the horrible weather and the great cyclone which devastated so many points in Kentucky, a few days ago, the attendance was much smaller than I expected to find, and the bidding less animated. The consequence was that all who bought will make money, for the prices at which lots were knocked off were very low.

Clay City is on the confines of the blue grass region, twenty miles east of Winchester, which it bids fair to rival at no distant day, and may be called "the Gate City of the Mountains."

Mr. F. D. Carley, who is president of the Kentucky Union Railroad, and a remarkably successful man, assured me that the developments on the line of his road, which would soon be built to Big Stone Gap, were calculated to make Clay City a place of great importance.

The following from the Lexington (Ky.) Transcript gives interesting information to all who may wish to invest in Eastern Kentucky, in whose development I am satisfied many millions of dollars will be employed within a twelvemonth.

"Few Kentucky towns," says the Transcript, "enjoy advantages approaching those with which Clay City is favored. It is no new place, having figured historically as a center of iron industry more than half a century ago. It is located properly to become again a center of that important industry. Coal and iron are within its reach in abundance. It has not kept pace with other manufacturing communities because of its isolation and lack of facilities for transporting the manufactured product of its furnace to the markets of the country. It has had the river privilege to be sure, but that has been a tedious and dangerous, as well as costly, mode of transportation by reason of the many disasters which overtook the boats laden with their freight of iron on their way down the swift current of the Kentucky river. There is hope now, however, that all the old order of things will be reversed. The completion of the Kentucky Union Railroad has revived Clay City and brought it once more to the front as a center of the iron manufacture. The great Red River Iron Works are located only ten miles from Clay City. Their iron is prized the world over for its superior quality for the manufacture of car-wheels. It has been in demand always, but on account of the difficulties of transportation it has been practically shut out of the market and cut off from competition with the product of furnaces in more favored localities so far as transportation is concerned. The completion of a switch from the Kentucky Union Railroad to the furnace will put this iron again in the market where it will have the advantage over all others for the purpose indicated, and drive the inferior article out of competition. This will necessitate an enlargement of the plant and the consequent addition to the material prosperity of Clay City. Other towns have been boomed upon the prospect of obtaining an iron furnace and roller

mill, but here is a town with such an enterprise already in operation and with a world-wide fame. Red river iron needs no advertising to the world, and Clay City will soon be in the same very enviable situation.

"The site of Clay City is a beautiful valley encircled by hills and by the rapid Red river, whose waters furnish an abundance of power for any number of industries. The climate is salubrious and the location picturesque.

"The river has been utilized as a motor for operating the largest saw mill and planing mill in Eastern Kentucky. It is an immense concern, its sheds, dry house, etc., covering acres of ground, and its capacity 200,000 feet per day. A race has been dug from the river, which carries the water through the mill on a rapid down grade to the river again, at a speed and with a force equal to all emergencies. There is a surplus of power enough to operate another mill of similar size and capacity. This mill gives employment to a large number of men whose cottages adorn the high ground near the mill, which, with the stores and other public buildings, give to that section of the town a lively appearance.

"In the prospectus issued by the Clay City Land Co., it is stated that the mill plant cost \$300,000. The men who invested that sum at that place hardly dumped it in there for amusement. They must have had abundance of encouragement of a substantial kind, and trustworthy proof of the advantages of Clay City as a location for a saw mill of such magnitude, for it is one of the most complete establishments in the United States. As a matter of fact it could hardly be otherwise. Lumber of the best character ornaments the hillsides in the neighborhood of the town, and what else is needed is easily floated down the streams that direct their course to Clay City.

A FURNITURE FACTORY

is the reasonable consequence of such natural supplies. Already there is a furniture factory in course of erection, which will be of extensive capacity and capable of competing with similar establishments elsewhere on account of its being subject to no cost for the transportation of its raw material. This will give employment to several hundred skilled workmen, houses for whom are going up as fast as the labor can be had to build them.

A BRICK PLANT

capable of producing 50,000 pressed brick per day has been completed. It and the lumber mill are ready not only to furnish supplies for local buildings, but also to the neighboring towns of Eastern Kentucky as soon as communication with them is established.

OTHER IMPROVEMENTS.

There is in operation an electric-light plant of the Edison patent, water works and, in course of construction, an ice plant. It is proposed in the course of the year to erect a charcoal furnace for smelting the car-wheel iron ore and pottery and tile works, a spoke and axe-handle factory and numerous other industries.

A great deal of money is behind Clay City, and I know of no point where wood-working industries would pay better.

The proceeds of the sale of lots are to be invested in new factories. The city already has more than a mile of paved streets, three hotels, to which another and very magnificent one will soon be added, a fine bank building and a number of handsome stores. And yet lots are sold right in the heart of town for \$25 a foot.

I do not think the sale had been advertised out of Kentucky, and in view of the cyclone everybody in Kentucky felt blue. However, that is all the better for future investors. Lots that sold for \$25 to-day ought to and will sell for \$50 before 60 days.

THOMAS P. GRASTY.

BASIC CITY.

The Beautiful City of the Shenandoah as Seen by an Experienced and Impartial Observer.

FLORENCE, ALA., April 2, 1890.

Basic City is in the great valley of Virginia. For beauty of location it can not be surpassed in America. Nestling at the foot of the Blue Ridge, laved by the crystal waters of the south branch of the Shenandoah, surrounded on the north, east and west by a vast extent of gently undulating country, alternating with hills and valleys and sparkling streams, with the perennial verdure of luxuriantly growing crops and the towering peaks of the Alleghanies in the distance, here is an enduring picture of entrancing loveliness. Here the tired business man can find recreation, the home-seeker the ideal of his dreams, the invalid the surest panacea.

No city has superior advantages. Situated at the junction of those progressive railroads, the Chesapeake & Ohio and the Shenandoah Valley (N. & W.), competitive rates are secured to all points North, South, East and West, with seaboard connections at Newport News, Richmond and Norfolk.

Its resources are vast and varied. Iron ore abounds near at hand, and the ores of the Basic City Co. are amongst the richest in the South. Experts can scarcely distinguish them from the best Lake Superior ores. Some of the most valuable manganese mines in the world are within seven miles of Basic City, and on the Basic City Co.'s mineral property rich deposits are accessible. Ochre is abundant, and fire-brick, pottery and other clays. Excellent timber covers the mountain sides and coves, and bark of superior quality awaits the call of the tanner. The valley is unsurpassed as a farming and fruit country. This is the home of pure water. Freestone, lithia, chalybeate and other springs are numerous and never-failing.

It stands as an incontrovertible fact that the numberless advantages of Basic City make it one of the coming manufacturing, industrial, commercial, distributing and business centers of Virginia.

The people here believe in the higher moral and educational influences. Churches and classical schools fill the greatest measure of their attention.

My business has made me acquainted with almost every new and growing town from the Potomac to the Gulf, and in defense of truth I must say that in my judgment the natural inducements met with at Basic City overshadow those of any other town south of Pennsylvania.

Not only do the natural inducements overshadow, but in the management of the Basic City business affairs I see a great gain over like matters at some of our new towns. Here facts are stated, promises fulfilled and business propositions are treated with business punctuality. The fact is, the managers of Basic City are solid business men, and they know how to handle business propositions. With wise forethought they have not followed the plans of other town builders. Instead of booming up a grand land sale, the managers here are using all their efforts to secure substantial and diversified industrial enterprises. These once secured, a permanent and self-sustaining resident population will be secured, and the demand for houses will be filled by the monied stockholders and by others who feel a personal interest in the welfare and growth of the town. Herein lies the keystone of prosperity and permanency.

The manufacturers they have secured are new plants with new machinery and equipments. So, too, Basic City offers inducements to the artisan. Reservations are

made for the home-seeking mechanic. Speculation will have no foothold here. The investors are solid business men, manufacturers, mechanics and permanent settlers. They are coming here to work and to build up with the growth of the town. Their homes will be here. S. H.

TEXAS SPRING PALACE.

Fort Worth Outdoing All Former Efforts.

One of the most noteworthy events in the South during the year 1890 will be the holding of the famous Texas Spring Palace at Fort Worth, which opens on May 10 and closes with the ending of the month. No city in the South has displayed more consummate skill and enterprise in that modern art of all arts, advertising, than this city, and with such a previous record, there is no danger but that the city will do itself proud in its usual manner in the Spring Palace of 1890.

"Texas at a glance" is the expression often used in connection with this palace, and it is very expressive and comprehensive, as the palace displays to great advantage all the resources of the "Lone Star State." The progress of each year shows that the vast and varied resources of Texas have not been even approximately comprehended. The past twelve months have been the most remarkable in the history of development in Texas. Unknown counties have been peopled and new towns and cities have sprung up almost in a day. Great railway systems have been extended, rich and vast deposits of iron and coal uncovered and worked, and new and immense industries established. The State is no longer an immense cattle range, but a State with as great a variety of industries and occupations for its people as any other.

With such a large percentage of development taking place during the past year, the Spring Palace can be filled with exhibits, constituting a great object lesson concisely and practically showing the State's growth. Those who attended the exhibition last year will want to attend it this year to see just what this growth is, and those who have not seen any previous exhibition will wish to attend this one, so as to be able to follow the future growth and development of the State.

In order to satisfy the very large demands for space, the managers of the exhibition have found it necessary to greatly enlarge the building and increase its facilities. In itself the building is remarkably attractive, and at the time of the exhibition it will be elaborately decorated with the products of the soil and specimens of the ingenuity of the people. The upper floor will be in charge of and arranged by the women of the State.

There will be no display of machinery, but simply as complete, representative and comprehensive a collection of the products and resources of the State as it is possible to get together. All the eleven railroads centering in the city have provided greatly reduced rates in encouragement of this undertaking, and Fort Worth proffers hospitality to everybody interested in the progress, or curious to learn the advantages of one of the most promising States of the Union.

Few annuals reach us that contain as much valuable reference matter as does "The Coal Trade," the seventeenth issue of which is just at hand. It is exactly what its title page says—"a compendium of valuable information relative to coal production, prices and transportation at home and abroad, with many facts worthy of preservation for future reference." This annual is the work of Frederick E. Saward, editor of the Coal Trade Journal, a most careful and skillful compiler and writer.

THE MINERAL CITY.

A VALUABLE ACQUISITION.

The Bohannan Property Purchased by a Syndicate.

Over 11,000 Acres of Mineral Land Secured—Pulaski City Advancing on a Solid and Safe Foundation.

[Spec. corresp'dence MANUFACTURERS' RECORD]

MAPLE SHADE INN,
PULASKI CITY, VA., April 7, 1890.

Every expression contained in the caption is strongly supported by facts.

The recent purchase of the Bohannan property, containing about 834 acres of land, in addition to the 11,000 acres of mineral properties acquired by the Pulaski Development Co., has been a very important event in the history of this city. The coveted key to the situation has been obtained at a cost of \$400,000, but it was a judicious investment, as the future will demonstrate.

The "Mineral City" of the Southwest is situated on the main line of the Norfolk & Western Railroad, and at the terminus of the Cripple Creek Extension and the Altoona Railroad. The connections already constructed and others in contemplation make it easily accessible from all sections. The city is practically an infant in age. Four years ago it was merely a "railroad tank;" to-day it has a population of almost 3,000. The Cripple Creek Extension affords the development of the surrounding country by discovering a vast mineral section, tributary to the line, that arrested the attention of capitalists interested in the great deposits of iron, zinc and lead, and this is amply sufficient to make Pulaski a strong manufacturing center, closely connected with the coal and coke fields of Pocahontas, which are equal if not superior to the Connellsville output. Previous to the purchase of the Bohannan property and the mineral land, Pulaski, by reason of its natural advantages, presented inducements possessed by few cities that make any pretensions to future development, but the acquisition of 834 acres, suitable for residence lots and manufacturing sites, and located almost in the very center of a thriving and progressive town, is of inestimable value.

The property is situated at the junction of the Cripple Creek Extension of the Norfolk & Western Railroad, immediately adjoining the city, the extreme boundary of which is not over 1 1/2 miles from the "central line" of the present limits. The company is having it platted and divided into lots, reserving, however, sites for manufacturing industries.

Peak creek, a beautiful mountain stream, traverses the property for a distance of almost two miles. The company has awarded the contract for a 150-ton furnace, a counterpart of the Pulaski Iron Co.'s furnace, with some late improvements, the construction of which will be commenced at once. The question naturally presents itself: Where does the company propose to obtain the ore necessary to run this furnace? Ample provision has been made by the purchase of 11,000 acres of valuable mineral land as there is in Southwest Virginia. Experts fully acquainted with the values of "Virginia's latest resource" pronounce the supply sufficient for an indefinite period and of the finest and most valuable quality. From this it will be seen that the company was cognizant of how they could proceed and what they could do before embarking in the enterprise.

In the manufacture of iron, limestone is an essential pre-requisite. This was found in abundance, the largest beds being located directly at the mouth of the proposed site of the new furnace. This is an advantage, for the cost of freight is ob-

viated and the cost of the manufacture of iron is correspondingly reduced. In addition the company are the owners of nearly nine-tenths of all the limonite ore in this entire section. On the mineral property are five charcoal furnaces, two of which are in blast, but all of them will soon be made available by the extension of the railroad from Ivanhoe to Speedwell, this road having been guaranteed by the Norfolk & Western previous to the purchase of property. Over one hundred dwellings and store-houses are on the land, also a merchant mill. There are four strong and well built dams across Cripple creek, giving plenty of water power.

That Pulaski is a flourishing and growing city in the very center of the mineral region of Southwest Virginia, is an established and patent fact. That it is destined to be an iron center is admitted.

The Development Co. will erect a hotel on the Bohannan property at once, and have also secured the plant of one of the largest car work factories in the country, and cars and car wheels will be manufactured here, the latter out of the charcoal iron which abounds on the property. Other industries will also be established. A dummy line of road extending from the Bertha Hotel to the Cripple creek junction, and entering the principal streets of the Bohannan property, will be commenced in a few days. The charter members of this company are Geo. W. Palmer, Geo. T. Mills, L. S. Calfee, J. A. Moore and others, all representative business men of this section who possess broad and liberal views and do not hesitate to invest their money in enterprises calculated to advance the interests of the city.

The officers of the development company are Geo. T. Mills, president; Jno. W. Robinson, vice-president, and L. S. Calfee, secretary and treasurer. The Bohannan property is admirably located. The climate of Pulaski is excellent. The altitude is 2,000 feet above the sea.

Pulaski City is established on a solid and safe foundation, which is a guarantee of success and material advancement. All who contemplate locating in the South, whether to engage in manufacturing enterprises or for any other purpose, are invited to visit Pulaski and examine its numerous advantages before deciding upon a permanent and fixed place of abode.

CHAS. E. HERBERT.

San Antonio's Business Outlook.

SAN ANTONIO, TEXAS, March 31, 1890.
Editor Manufacturers' Record:

From a commercial point of view, San Antonio has always been exceedingly conservative, hence her merchants, as a general rule, have prospered in business, and many of them have accumulated large fortunes. This general successfulness is evidenced by the exceedingly small number of assignments, confined entirely to the smaller dealers, whose assets and exhibits foot up very insignificant amounts, while the tax rolls and magnificent residences and business blocks point out to even the casual observer the merchant princes whose fortunes have been made here.

Most of the farmers and stock raisers of the counties of West Texas, southeast and west of this place, do their trading here, hence the retail trade is much larger than one would suspect from a casual view of the situation. The little towns along the various lines of railroad for a distance of 150 miles in almost every direction are to San Antonio what little springs and streams are to the great waters, feeders and tributaries.

As the country becomes more and more densely populated, the large pastures cut up into small farms, San Antonio's resources will greatly multiply and the trade of her merchants will be vastly increased.

With a surrounding country rich in the production of all the cereals, fruits, vegetables, cotton and sugar cane, and with railroad transportation extending in every direction, no limit can be fixed to her growth and prosperity, nor can one guess, even approximately, the developments a few years may make.

A large amount of capital is invested in banking and a heavy business is done in that line upon the same conservative and sagacious plan followed by the mercantile community, not a single bank failure ever having been known in the history of San Antonio. There are now here ten banking institutions, three of which are national banks and the others private institutions conducted by men of large means accumulated in the business, for none of them had much capital in the beginning.

An unwanted move in real estate within the last few weeks indicates that her own people, as well as strangers, are awakening to a realization of the fact that San Antonio is on the highway of progress, and the advance in prices, both of business blocks and suburban property, indicates clearly that a new era has dawned upon her and she may look forward to stirring times in the future.

Real estate has advanced within the last month over one hundred per cent., and lots on the principal business streets that could not be sold a month ago for \$500 per front foot, are now eagerly sought after at from \$1,000 to \$1,500 a front foot, while suburban and country property in the vicinity of the city has taken proportionately as great a rise.

The county clerk informed me to-day that he had received and filed for record in his office during the present month over 300 transfers of real estate. He could not give me, even approximately, the value of the property thus changing hands, but thought it was up in the millions. The transactions of a single day last week amounted to nearly half a million, and every day now witnesses sales of large amounts. The maximum prices have not yet been reached by a great deal, for property which sold yesterday for what the "old fogies" considered enormous figures sells to-day at an advance of from 25 to 50 per cent., and thus each day property is resold, or adjoining property is sold, at a great advance, or the offers of large advances over the day before are refused. Within the month many deals have been made at a clear profit of \$10,000.

Not only is this stir in the business centers of the town, but the suburbs are also alive with energy, and the axe and hammer are making things hum "out in the brush," as is the common saying among the residents in regard to improvements going on outside of the densely populated portions of the city. No cry of "Woodman, spare that tree!" is heard, but the spirit of progress has trodden down sentiment, and the "pic-nic grounds," as well as the dells and grottoes—trysting places of lovers of yore—are fast disappearing before its ruthless march.

ELIAS EDMONDS.

THE Philadelphia Press says that the feeling in the iron trade is better than it has been for some weeks past, and prospects for further improvement are considered to be quite encouraging. There is more inquiry for steel rails, and the general outlook is improving, although prices are not more than steady at \$34 to \$34.50 at mill. The sharp decline in the price of slabs and billets has reacted to some extent on rails, and orders for the latter are comparatively more desirable than they were some time ago. Sales to date teach close on to a million tons, with a fair prospect for one million and a half tons or more for the current year.

Subscribe to the MANUFACTURERS' RECORD.

FORT PAYNE.

Building Progressing Rapidly—Eight Miles of Home-Made Pipe—A Vast Ore Bed Explored.

FORT PAYNE, ALA., April 5, 1890.

The weather for the past four weeks has been so unfavorable that building operations have been seriously interfered with. For two days past a change has taken place for the better and work has been resumed, but the temperature is exceedingly cold and chilly.

The coke ovens—100 in number—are progressing favorably and already the fire-brick lining is being put in. A short distance from the ovens an immense tank for washing the coal has been erected. Four hundred thousand fire-brick will be required to line the ovens, and they are all ready, having been made by the fire-clay works of this city.

Since my last letter the fire-clay works have begun the manufacture of vitrified sewer-pipe. They have a contract to make about eight miles of pipe to be used in putting in a sewerage system for Fort Payne. The quality of the pipe turned out is first-class.

The lining in the furnace stack is about completed. The foundations are all in and ready for the arrival of the blowing engines, which are expected during the coming week. Two engines have been purchased so as to provide against any accident.

The deposit of brown ore within 1,000 feet of the furnace, mentioned in my last, promises to be much more extensive than was first supposed. This deposit has been followed some distance, and there is every indication that it will be 20 feet in thickness. The outcroppings are plainly visible for 1,500 feet.

This ore bed has already attracted the attention of some iron experts, among others, James M. Davis, an old Pennsylvania furnace manager, who visited Fort Payne to examine the deposit. He pronounces it the finest he has ever seen either in the North or South. Mr. Davis came here at the request of some large Western capitalists who expect to raise stock for another furnace if they are satisfied with his report. That report will be favorable.

Major Godfrey has just returned from Boston and informs your correspondent that all the plans have been laid and part of the stock is already taken for a third furnace.

The Bay State Furnace Co. have already located their plant and work on the same will be begun in a few days. The furnace will be located a short distance west of No. 1.

The news has just reached this city that the entire Cardiff excursion has agreed to come to Fort Payne immediately after the land sale is over. Ten trains of Pullman coaches will be run to this city. The railroad company is now putting in side tracks to accommodate the cars.

The plans are all completed and bids invited for the erection of a new passenger depot, which is to be one of the finest in the State. The Fort Payne Coal & Iron Co. has sold to the Queen & Crescent Railroad sufficient ground for a freight-yard, and work on the new depot will be commenced in a short time.

The brick-work on the main building of the Foster Builders' Hardware Co. is almost completed to the top of the first story. The foundations for all of the other buildings are nearly finished.

There is some movement in real estate, but transactions are rather quiet.

J. M. V.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year or six months for \$2.00.

DENISON, TEX.

Steady Progress—Increasing Population—Unflagging Energy—Individual and Corporate Public Spirit.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

DENISON, Texas, April 1, 1890.

The onward movement in Denison continues, and it is safe to say that the record of progress made in the year 1890 will greatly surpass all previous ones. New enterprises are projected every week and improvements of one kind and another are noted daily. Since my last letter the Denison, Sherman & Dallas Railroad has been chartered, and, within this year, the road will be completed from this city to Dallas, affording a competing line to worry the Houston & Texas Central and, no doubt, compel the latter to build in a southeasterly direction from Denison to a connection with the Frisco road. The bill granting the Denison & Washita Valley road an extension of time in which to build through the Indian Territory to Denison has passed the federal house, and there is no doubt that it will be passed by the Senate. The railroad situation and outlook may, therefore, be said to be exceedingly encouraging. Another enterprise that seems likely to be consummated very soon and which is of vast importance to Denison is the building of a wagon bridge across the Red river, at what is known as Colbert's Ferry. There was once a \$40,000 bridge at this point, but it was carried away by a freshet several years ago and has never been rebuilt. Colbert's Ferry is situated about four miles from the city. The traffic to and from Denison is very important and would be greatly increased if the farmers and traders of the Indian Territory did not have to cross and recross on a primitive ferryboat. Since the destruction of the bridge much of the trade which formerly came to Denison from the Territory has been diverted into other channels. The building of another bridge has been often agitated but somehow always without result. Now, however, the Colbarts, men of large means, have come to the front with a proposition which will almost certainly be accepted. They offer to build a new bridge, estimated to cost \$40,000, provided the people of Denison will macadamize the four miles of wagon road between this city and the Red river. A representative of the Missouri Valley Bridge Co. is now here consulting with Mr. Frank Colbert, and it is expected that a definite proposition will be submitted by him to the people of the city. The bridge would be a toll bridge, but only a fair toll would be exacted. This improvement, as all Denisonians know, would be one of the most important that could be made.

Work on the Chestnut street railroad has progressed considerably. The roadbed has been dug out through Chestnut street from Houston to Perry avenue, thence northerly along Perry to Main street, and from there westerly to Maurice avenue. The same company has been granted a right of way northerly through Houston avenue by the city council. The franchise of this company permits them to operate by electric power. When this line is running Denison will have within her corporate limits eight miles of steam motor, over six miles of horse, and several miles of electric railway. The Denison Street Railway Co., now using mules, have also decided to greatly extend their system, and have given the city the proper notice thereof, as required by their franchise. Denison will soon be a perfect network of railways. It is already impossible to enter the city without crossing one or more roads. Building continues unabated. The National Commercial College, projected, seems assured. The capital stock of \$50,

000 has been subscribed, and 400 scholarships have been taken, mostly by citizens of Denison, at \$100 each, making \$90,000 that has been raised. The placing of an additional \$10,000 worth of scholarships ought to be an easy matter. A large number of dwellings are in process of erection, and every architect and contractor is busy. Work on the cotton mill site is progressing rapidly, and Contractor Greene, of Chicago, who will build it, is on the ground. The county commissioners have decided to build an iron bridge over Pawpaw creek, and a considerable sum has been raised by private subscription in the city and among the country people east of the city, to grade and macadamize the approaches and build culverts. A good indication of the kind of building movement going on here is the opening of new brick-yards. Less than a year ago there were but one or two small yards run by horse-power. Now there are two extensive steam brick plants running, another about to change to steam, and several smaller yards with horse-power. All are busy. It is believed that the best grade of terra cotta can be made here, and parties have been here recently who offer upon certain conditions that will likely be complied with, to establish a very extensive plant here for the manufacture of such goods. The Board of Trade, which, after repeated agitation by the Herald, has been organized, is already doing good work. Congressman Hare has been before the committee on public buildings, and urged the report of a bill appropriating \$100,000 for the erection of a public building in Denison. Whether a bill will be reported at this session is not yet known. The Board of Trade is taking an active interest in this matter. Mayor Tonne estimates the increase of population in 1889 at fully 3,000, and the indications point to a further increase in 1890 of at least 6,000, figures which will be greatly exceeded if certain enterprises materialize within the year.

CITY OF BESSEMER, ALA.

Chief Features of President Courtney's Report.

The Bessemer Land & Improvement Co., capital stock \$2,500,000, in \$100 shares, full paid and non-assessable, publishes its third annual report and cash exhibit for the past fiscal year for the information of stockholders. The company has no shares to sell.

In reviewing the affairs of the company for the past fiscal year now about to end, and as well taking in retrospect the whole period of the company's business life, there is seen on every hand much to encourage and much to point to in substantial progress and achievement.

When the work of a brief 36 months is dispassionately examined, with its origin in 4,000 acres of field and forest, and at this time the reality of a goodly sized city, fairly complete in the essentials of a municipality—an organized city government, its public credit fixed and recognized as on a permanent basis; in its industrial features pointing to five blast furnaces operated within the city, and others in sight of it; with 900 coke ovens illuminating the night with their ceaseless fires; the great rolling mill and other extensive industries giving employment to thousands, all of which may be seen and inspected, and need not be enumerated here; so it is that the site of field and forest is changed in three years to a center of population, with its 1,000 and more buildings, its water supply, its sanitary system, its numerous churches, school-houses and organized social bodies; where, within 2½ miles of its spacious city hall, \$1,000,000 are paid out annually in wages. These briefly recited facts present an object

lesson in town-building as remarkable in its actual present results as it is full of promise for that near future of still greater growth, of which the past achievement is but the initiatory step.

All good omens certainly beckon Bessemer onward, but it is not alone the duty of the land company to promote its growth. Every citizen might have a worthy part to act in this good work of city building.

FINANCES.

The obligations of the company entered into in previous years, promotive of the founding of large and permanent industries here, extended into the past year's business, and the major part of the first three-quarters income of 1889 (April 1st to December 31st) was absorbed in payments on these several accounts.

It is a fitting time to observe that of all the remarkable features which illustrate the growth of Bessemer, none are more conspicuous or more commendable than the wonderful financial ability which has marshalled from many quarters the very large capital concentrated here in coal and iron mines, coke ovens, rolling mills and other costly industries, and it will be a source of satisfaction to every stockholder to learn that their directors are the chief actors in this great work—the laying of the solid foundations of Bessemer. I am privileged to say this because I did not share in this large and beneficent achievement. *

It is a satisfaction, however, to note that the efforts made to increase the company's collections have met with fair success, and that at this writing the company's finances are in a strong position, with the promise of still larger cash figures for the new year, upon which it will soon enter.

In the face of the serious drawbacks referred to earlier, the money receipts for the fiscal year now closing show an increase of 63 per cent. over the previous year.

CASH STATEMENT.

Cash receipts, April 1st, 1888, to March 31st, 1889	\$111,374.51
Cash receipts, April 1st, 1889, to March 31st, 1890	181,409.60
Gain for last year	\$ 70,035.09

It is a further satisfaction to announce to the stockholders that the company has at this writing no outstanding money obligations, and I am pleased to be able to add that certain sums of money heretofore advanced to industrial corporations will be returned to the treasury of the company at an early day.

THE WATER-WORKS PLANT.

Coeval with the sale of the first lots and the erection of the first buildings, the thoughts of your directors were turned to procuring a supply of pure water for the needs of the coming population and their industrial wants. Some months were spent in examining different systems and determining plans, and in September, 1887, the work was undertaken, but, owing to very inclement weather, it was not completed until June, 1888.

This large investment of over \$100,000 was undertaken at that early date solely in the general interests of the citizens and of the business of the community, and not in expectation of any immediate return on this outlay.

The works have been extended until at this writing there is a total of 42,635 linear feet of mains (8½ miles), and the increase of business is satisfactory at this date and most promising for the future, as appears from the comparative figures of income herewith presented:

THE COMPANY'S REAL ESTATE.

It will certainly interest every stockholder at this time to examine the condition of the company's extensive possessions in real estate. To this end I have gathered all the information attainable, and propose by impartial and uncolored exhibits and comparisons, to show that in this respect as well as in its improved financial condition, this company is in very strong

position, and that in the presence of such facts increased values for their shares may confidently be expected by stockholders in the near future.

Stated in a general way, the company platted about 15,000 lots. Deducting reservations for industrial plants there were at the beginning about 12,500 lots for sale, (exclusive of about 600 lots added during the past year.) Of this total number, the following sales have been made to real estate companies, under inducements to make improvements here, in the building of stores and residences for the accommodation of population and business.

To the Carolina Real Estate Co.	238 lots
To the Orleans Land & Building Co.	153 "
To the Natchez Land & Improvement Co.	124 "
To the Wylie Land & Improvement Co.	130 "
Total.....	635 "
To private purchasers.....	920 "
Grand total.....	1,555 "

The prices paid by the land company per front foot were \$10 to \$25, except in the cases of a few special lots for special purposes. The prices paid by individuals for single lots, or groups of lots, were \$10 to \$75 per front foot. The terms and conditions in the sale of lots to these several land companies present these aspects. The concessions in price induced the erection of many handsome blocks of buildings, notably the "Charleston Block," and others on Nineteenth street and Second avenue. The immediate result was of course to place these several land companies, which erected buildings in compliance with their agreements, at an advantage over the parent company in the sale of their remaining lots. But while this is so, it does not follow but that this company has its collateral equivalent in a very much larger number and better class of buildings erected than could have been otherwise secured in the then early days of the city.

These features of our early beginnings, account for the following results, as shown in the real estate transactions of the year now closing. Three of these land companies sold during the past year 65 lots at prices ranging from \$10 to \$100 per front foot, and aggregating \$68,000—\$1,050 each. This company has sold in the same period 44 lots at prices ranging from \$10 to \$72 per front foot and aggregating \$22,000, \$500 each. Lots vary in frontage, being 20, 25, 45 and 50 feet respectively.

THE VALUE OF THE COMPANY'S ASSETS.

I respectfully direct the attention of stockholders to the annual statement of the secretary and treasurer, showing the general condition of the company's affairs to be highly satisfactory. I direct special attention to four items in this exhibit:

1. The item of \$477,646.87 represents land notes and interest secured by first mortgages.

To particularize the present condition of these assets it is as well to state that over 90 per cent. of this total represents bills receivable, not only secured by the original mortgages, but upon which one-fourth to three-fourths of the purchase monies have already been paid. It follows that the remaining payments are assured beyond any contingency. By reference to the treasury statement it will be seen that payments on account of land notes aggregated the past year \$165,567.74. The entire sum of \$477,645.87 in remainder, with unimportant exceptions, falls due in the coming fiscal year, and in the present promising future for this city, may reasonably be expected to be substantially liquidated in the period named. Of the small remaining amount of bills receivable (less than 10 per cent.), in addition to the original liens on the lands, the paper is otherwise well secured, so that the entire land note assets are in the most approved shape, and will realize cash in the near future.

2. Loans of money to corporations and individuals, \$127,927.80 on collaterals, all well secured.

3. Cash in bank subject to check, and short date loans equivalent to cash as needed, \$75,984.55.

4. The water works plant is steadily changing its once dependent position, and promises in the coming year to advance itself to a handsome paying condition, and so adds to the favorable financial condition of this company.

The cash balance will also be noted as much larger than heretofore at this season of the year.

As satisfactory as these exhibits must be to the stockholders, an analysis of the intrinsic values in the company's real estate will be still more so.

OVER 11,000 CITY LOTS FOR SALE.

The present lot holdings of the company comprise over 12,500 lots. Reserving areas for coming industrial plants, it is interesting to review these values, soon to be active assets of the company by sales from month to month in the next few years. To do this intelligently and prudently, I will reverse the sometime policy of land companies, and use for illustration minimum instead of maximum figures for lot valuations.

The average price of lots on all the sales made, say 1,555 lots, has been \$545. The average price of lots on sales to individuals has been \$617.

To exhibit the remarkable strength of this company's real estate position, I make a comparison based on the lowest of the averaged figures, and on transactions taking place:

1. When the city's population was at its minimum point.

2. When its industrial plants were hardly more than prospected.

3. When the city itself was hardly more than a venture as against present permanent and promised conditions, which show:

1. A large and rapidly growing population.

2. Fifteen million dollars centered here in furnaces, mines, rolling mills and other extensive industries, with large attendant pay rolls, believed to amount to a million dollars a year, within a radius of two miles and a-half from the city hall.

3. With the city itself a recognized municipality with a high credit and bright future.

If then under the former doubtful and meager conditions the prices of lots averaged \$545 and \$617 each, it will certainly be a very conservative estimate to make calculations on the basis of the smallest figures.

If these 11,000 lots are sold at one-third of \$545, say at \$180 average, or at \$3.60 per front foot, \$2,000,000; if at two-thirds or \$7.20 per front foot or \$360, \$4,000,000; if at the first average \$10.80 per front foot or \$545 a lot, \$6,000,000; if sold at an average of \$15 per front foot, it would amount to over \$8,000,000.

These comparative statements show calculations on minimum figures, all below the average figures of the actual sales of the past year, these having been made from \$10 to \$100 per front foot, certainly an average of more than \$15, the maximum figures of the above exhibit.

It is then unreasonable to calculate, that in the changed conditions by which Bessemer is now environed, the still greater changes growing out of the planting here of large industries and the certain consequent growth of population and business that within the next two years \$15 a front foot will be considered a low price for a lot anywhere in Bessemer, especially when \$10 per front foot is being actually paid now in what are regarded remote sections of the city.

In further proof, that city lots in new Southern cities are advancing in value rather than receding, I note the recent sale of 576 lots of average size in a new Southern city for \$650,000, or an average of \$1,129 per lot, equal to \$22.50 per front

foot, without a single industrial plant as yet in operation, and the first stores and residence houses only now being built.

It is a trueism, that the main point in a comparison is the point of view; hence, I have kept within the safe limits of fairest comparison, by using the smallest possible figures in estimating prospective land values in Bessemer; despite the data before me, of lot values in other new and growing Southern cities, stated in much larger figures, and subsequently more than realized. With these facts so well known, I have purposely understated land values here, so that in three to five years the actual figures realized will, I am sure, largely exceed those now used only for safe illustration. Under these ascertained facts, no earnestness of language is needed to impress stockholders with the value of their property, nor to assure them that present market quotations have grown out of the want of authentic information of the company's actual position, which is now given fully and impartially.

"The South," says the late Representative W. D. Kelly of Pennsylvania, "is the coming *El dorado* of American adventure," and these real estate transactions prove his prediction.

THE OUTLOOK FOR BESSEMER—1890-91.

Having shown what has been accomplished here in three short years in town building; having shown the strength of the company's present financial position; having shown its wonderful future in real estate wealth, it is in order to demonstrate the means to the end of realizing these indicated results. The founding here of industries which will require skilled labor, the bringing here of a desirable white population, these are the means to the end which, properly availed of, will secure 15,000 population here in the next two years.

Let us examine Bessemer's unequalled advantages from the manufacturing investor's standpoint.

First in iron making, here is a city with the heavy foundation work accomplished, inviting capitalists to enter in, free of cost, and build their superstructures. All iron industries have over \$4 per ton advantage in price of pig iron over Pittsburgh. The iron ore can be mined and put in the stock-houses of Bessemer furnaces at 75 cents per ton. Coal yielding 62½ per cent. in coke costs in stock-house \$1.80 per ton for coke.

To contrast the growth of Southern iron making I will mention that the entire output of pig iron in the State of Alabama in 1880 was 77,190 tons, while the furnaces of Bessemer will alone put out 250,000 tons in 1890.

THE GREAT CONSOLIDATION OF COAL AND IRON MINING, FURNACE AND COKING INTERESTS.

During the last year the several extensive properties at and near Bessemer were consolidated under the name and franchise of

THE D'BARDELEBEN COAL & IRON CO. with a capital of \$10,000,000. This great corporation also "owns 4,683 shares out of a total of 8,308 shares of the Eureka Mining & Furnace Co., of Oxmoor, near Bessemer. Two new 17-foot furnaces with complete plant, valuable coal mines and also the largest iron ore banks in the South are embraced in this property."

The aggregated property of the consolidated De Bardeleben Co., together with that owned by the Eureka Co. consists of "seven blast furnaces, new and fully equipped, with a daily capacity of 800 tons of pig iron; seven coal mines, with a daily capacity of 5,000 tons; seven ore mines, with a daily capacity of 4,000 tons; 900 coke ovens; 25 miles of standard gauge railroad; limestone and stone quarries opened and operated by the company; also 940 houses of all kinds, with other properties and advantages," not necessary to be enumerated, thus making the city of Bessemer

the center of these vast and constantly increasing industries.

BESSEMER ANNUAL PIG-IRON OUTPUT 250,000, AS AGAINST ALABAMA'S TOTAL OUTPUT IN 1880 OF 77,190.

In the vast field of iron manufacture the sources of supply here are superabundant and cheap from this colossal corporation, with its chief office in Bessemer.

Col. McClure, of the Philadelphia Times, has made this prediction: "I have studied the resources and opportunities of Alabama with especial interest because they are certain to revolutionize some of our chief sources of wealth in Pennsylvania."

Capital in iron manufactures will soon find its way here, contributing to Bessemer in business and population, and Col. McClure's prophecy is soon to be fulfilled.

Outside of iron production and the multiplication of iron manufacturing industries Bessemer has three other wealth sources on which to develop and build her future. This city is proximate to the vast coal deposits of Alabama; proximate to the cotton fields of Alabama; proximate to the forests of Alabama yellow pine, yellow poplar, all the oaks, ash, hickory, gum, chestnut, maples, walnut, cherry, beech, basswood, pecan, persimmon, dogwood, buckeye, and all the cedars, in superabundant supplies.

Coal can be contracted for at \$1.25 per ton, delivered in Bessemer at cotton mills and iron and woodworking establishments, as against \$3.50 to \$4 a ton in New England, with their further disadvantage of much greater distances from supplies.

Having shown that this company has been the promoter of great iron plants and other industries here; having shown that it has come to a strong financial condition, it is next in order to show that in the future, as in the past, its resources will be freely used to advance Bessemer.

In January last the directory considered a proposal for the establishment here of a great railroad car building manufactory, and have made all the financial arrangements required by this proposal to establish this enterprise here on the extensive scale outlined by its projectors.

Fifty acres of land have been reserved for this large industrial foundation, one-third of which is to be occupied by buildings; several hundred skilled workmen will find constant employment here, producing a number of finished cars daily, and aggregating a business of millions of dollars; the effort of this and other industrial establishments will largely augment the population here, and soon advance Bessemer to the position of a leading manufacturing center.

On the first of February last, after finding the necessity for an active agency at some central point in New England, with the view to communicating with the large class of Eastern investors seeking Southern locations for their industrial plants, your directors opened an office in Boston, placing it in charge of Mr. S. W. Nickerson as general agent for the six New England States.

The Bessemer Land Co.'s office, in Boston, is in room 72, in the splendid building of the Mutual Life Insurance Co. of New York, in Postoffice square, the financial center of that city, and active work is progressing in those States at this writing. Very favorable results are expected from this organized effort to reach the industrial capitalists of that prosperous section of the Union.

W. M. COURTEMAY, Pres.

S. H. PHELAN, Atlanta, Ga., writes: "I have a stream furnishing from 4 to 6 inches of water, with a fall of 15 to 17 feet perpendicular. I desire to utilize this to force water into a reservoir 1,500 feet away at an elevation of 70 feet. I desire to know if I can get a water-wheel to run a pump that will give better results than a ram."

CITY OF CARNEGIE,

* VIRGINIA. *

The New City of the Southwest.

Situated directly on the Main Line of the Norfolk & Western Railroad and in close proximity to the Great COAL and COKE FIELDS of POCAHONTAS.

Among its Resources are Banks of Hematite Ore, Practically Inexhaustible, Ranging from Seven to Fifteen Feet in Thickness.

Admirably Located, Magnificent Scenery, Plenty of Pure Spring Water, Excellent Drainage, Climate Unsurpassed. It is the Most Inviting Town in Virginia.

THE COMPANY OFFERS LIBERAL ENCOURAGEMENT TO MANUFACTURERS DESIRING TO ESTABLISH PLANTS.

The Roanoke River passes directly along the property, which is of vast importance to manufacturing industries.

The lands of the Company are being platted, and will be offered for

SALE

at moderate prices fixed by the Company on

Tuesday, April 22, 1890,

on the following terms:

ONE-THIRD CASH, BALANCE IN 1 AND 2 YEARS.

For all information, printed matter and excursion rates, address

GEO. B. McLANE, Prest.
ROANOKE, VA.

The Authorized Capital Stock of the Company

— IS —

\$1,000,000.00

— WITH THE FOLLOWING —

BOARD OF DIRECTORS:

GEORGE B. McLANE, President, Carnegie City.

J. B. LEVY, President of the Citizens' Bank, President of the Roanoke Construction Co., Roanoke, Va.

HON. JOHN W. DANIEL, U. S. Senator from Virginia.

W. J. JOHNSON, President of the Citizen's Bank, Richmond, Va.

R. U. DEER, Attorney at Law, Roanoke, Va.

HON. J. R. JONSON, State Senator from Montgomery County.

HON. J. HOGE TYLER, Lieutenant-Governor of Virginia.

HON. GEORGE G. JUNKIN, Judge of the Court of Montgomery County.

HON. WM. H. BARCLAY, United States Pension Agent, Pittsburgh, Pa.

ON TUESDAY, APRIL 22, 1890,

THE SALE OF LOTS WILL BEGIN AT

* THE COMING CITY *

OF

CARDIFF, TENN.



In the Richest and Most Inexhaustible Coal and Iron
Region in the South.



To be built by W. P. RICE and his associates, who have
for that purpose organized the

CARDIFF COAL & IRON CO.

With a Capital of Five Millions of Dollars.



The Lots will be offered by the Company at a moderate schedule and the buyers will have the full benefit of the enhancement in values to be effected by the Company on a scale never heretofore equalled at any new town.

The Company's lands are situated in Cumberland, Roan and Morgan Counties, in East Tennessee. The famous blue-grass region of Kentucky lies directly to the north, on the main route to Cincinnati. One hundred and twenty-five miles to the northeast is Middlesborough and the fast-developing region of Cumberland Gap. The spot selected for the center of operations is in the heart of the beautiful Tennessee Valley and of this extensive, famous and rapidly-developing iron and coal territory.

TEN VESTIBULED SPECIAL TRAINS

Will be run from New England alone, besides Specials from all over the South and West.

PIEDMONT, ALABAMA.

* Delaware's Southern City. *

IN THE VERY HEART OF BROWN IRON-ORE DISTRICT.

Full Paid Capital of the Piedmont Land & Improvement Co. \$1,250,000

Large Portion of which will be Employed Establishing Great Industrial Plants.

The following enterprises and industries are guaranteed by the PIEDMONT LAND AND IMPROVEMENT COMPANY, all of which are now well under way:	
A 50-ton Charcoal Iron Furnace.	The best system of Electric Lights.
A large iron Rolling Mill.	Graded and Macadamized Streets.
A Car Wheel Works.	A \$35,000 Hotel Building.
Three Saw Mills.	A Bank Building, (for Bank of Piedmont), the finest in Northern Alabama.
An excellent system of Water Works.	

The Piedmont Land and Improvement Company have also closed contracts with two Eastern capitalists, who will at once erect forty dwelling houses, to cost not less than \$1,400 each, which will represent, when completed, together with the ground covered, an investment of over \$100,000.

These will be followed in the near future by the following, negotiations for several of which are now nearly completed:

Two 100-ton Coke Iron Furnaces.	A Passenger Car Works.
A Basic Steel Plant.	A Sewer Pipe Works.
A Large Planing Mill.	A Brick Works, and several other industries.
A Carriage and Wagon Factory.	

Such are a few of the many advantages that Piedmont offers to the manufacturer and to the investor, who are cordially invited to come and examine for themselves.

FOR ADDITIONAL INFORMATION ADDRESS

Piedmont Land & Improvement Co.
PIEDMONT, ALA.

200,000,000 TONS OF BROWN IRON ORE

IN SIGHT AT

BLUFFTON,

HIGH, HEALTHY AND HONEST.**GOOD PEOPLE AND GOOD WATER.**

LOCATED UPON THE ALABAMA DIVISION OF THE EAST TENN. VA. & GA. RY. SYSTEM.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889 article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

With high grade ores, analyzing over 50 per cent metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the dullest of dull times?

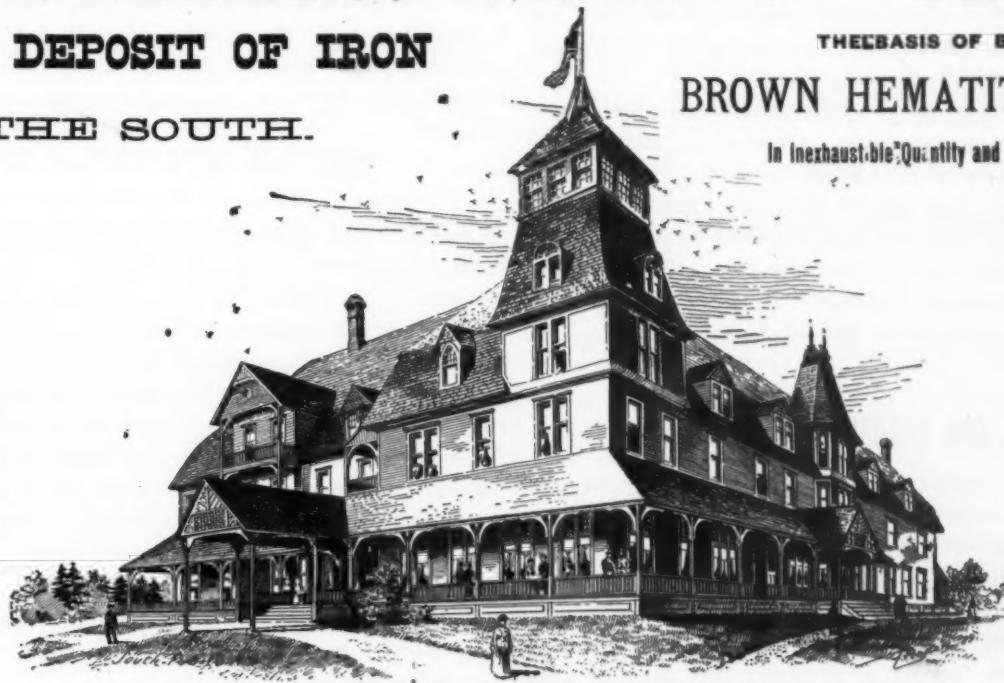
Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, The sample marked "Gravel Ore" marked "Bluff Ore," contains—contains—
Metallic iron, - - 52.37 per cent. Metallic iron, - - 53.23 per cent.
Phosphorus, - - 0.782 " Phosphorus, - - 0.981 "
Silica, - - 14.60 " Silica, - - 6.25 "
Water combined, - 8.10 " Water combined, - 10.20 "
Moisture at 100° C - 2.50 " Moisture at 100° C - 1.68 "

LARGEST DEPOSIT OF IRON

IN THE SOUTH.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

BROWN HEMATITE IRON ORE

In Inexhaustible Quantity and Excellent Quality.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

FREE MANUFACTURING SITES.

Rich Manganese Deposit.

There are several very large and rich outcroppings of Manganese Ore on the company's property, and the deposits have been examined by experts and pronounced exceedingly valuable. Specimens have been sent to various steel works in Pennsylvania, and the result is a large inquiry about the ore. From present development can be seen several hundred tons of this ore. There is always a ready market for manganese, and it is quoted at \$18 to 20 per ton in Pittsburgh and Chicago. More extensive work will be done on these deposits within a very short time, as the banks are easily accessible. Shipments will soon be made.

OTHER RESOURCES.

Fire Clay and Brick Clay—Yellow Ochre.

On this property are large deposits of fire clay, which has stood the highest test. Shipments have been made to Chattanooga, Tenn., and it is pronounced a superior quality. A fire brick works could be established here that would prove extremely profitable.

In brick clay there is an inexhaustible quantity, with an abundance of water running through the clay land. Brick manufacturing here would pay handsomely, and the company would lease the clay beds for a term of years at a very low royalty.

The four charcoal pig-iron furnaces surrounding this property are nearly as valuable to this place as if they were located on the land of the Bluffton Company. The pig iron manufactured by them could be bought and utilized here for every kind of manufactured iron. They are so near that freight on the raw material would be comparatively nothing. Surrounding us, as these furnaces do, it makes Bluffton a centre.

SEND FOR PROSPECTUS. ADDRESS

Bluffton Land, Ore & Furnace Company, Bluffton, Ala.

FACTS ABOUT FLORENCE.

LOCATION.

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

AGGREGATE OF ADVANTAGES.

There are many places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

IRON AND COTTON MANUFACTURING.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the axe has never touched.

COMMERCIAL AND AGRICULTURAL FACILITIES.

Besides its industrial possibilities, Florence is a point of great commercial importance, and is becoming the center of an extensive mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Several additional railroads are now under construction to open up new trade connections to Florence.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

BEAUTY OF LOCATION.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to either one of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Lauderdale Manufacturing Co. Florence Cotton and Iron Co. **Florence Investment Co. Florence Railroad and Improvement Co.** } **Florence, Ala.**

GROWTH.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

SOLID GROWTH.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

THIRTY NEW ENTERPRISES.

Within the last 12 or 15 months over 30 new industrial enterprises have been located at Florence, with an aggregate cash capital of about \$5,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

INDUSTRIAL ENTERPRISES IN OPERATION.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: One of the largest and best furnaces in the United States now in blast, and another under construction; a stove factory; a hardware company, with a capital of \$300,000, manufacturing fine building hardware, &c., the only factory of the kind in the South; a wagon factory, with capital of \$150,000; agricultural implement works; handle factory; woodenware factory; sash, door and blind factories; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill in operation, and a \$500,000 mill building and others projected; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a compress, packet and ferry company; building and loan companies; a canning factory; brick factories; a dummy railroad company, and a number of other enterprises.

\$15,000,000 INVESTED.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now about 10,000.

There are more than 1,000 carpenters at work in Florence but they can't build houses fast enough to keep up with the increase in population.

INVESTIGATION AND INVESTMENT.

A number of the foremost capitalists and iron and cotton manufacturers, and others, of Philadelphia, Boston and other Eastern cities, after a thorough personal investigation, have just made heavy investments aggregating several million dollars in Florence.

TREDEGAR AND JACKSONVILLE, ALA.

* The Devonshire of the South. *

Richest in Resources of Soil, Climate, Water, Timber and Minerals, of all the Industrial Places in this Section.

* AMPLE RAILWAY FACILITIES. *

A Favorite Summer and Winter Resort. Beautiful Scenery. Excellent Fishing & Shooting.

SUPERIOR ACCOMMODATIONS AT THE NEW AND CHARMING TREDEGAR INN, Conducted by the Company.

Highest Educational Advantages are offered by Calhoun College and State Normal School.

TREDEGAR is supplied with Pure Mountain Freestone Water from Springs elevated 200 feet above the town. Complete System of Water Works. Fire Plugs throw a six inch stream 150 feet. Ample protection against fire. Cheap Insurance.

TREDEGAR and VICINITY are Noted for Genial and Cultivated Society. Elegant Country Residences and Fine Stock and Jersey Farms Abound.

SULPHUR, CHALYBEATE, LITHIA and MAGNESIAN SPRINGS.

At no other Point in the South are like Advantages, Opportunities and Inducements to be Found for the Establishment of

Charcoal Iron Furnaces,
Coke Iron Furnaces,
Rolling Mills,
Foundries & Machine Shops,
Paper Mills,

Furniture Factories,
Wagon Factories,
Fire-brick Works,
Potteries,
Limestone Quarries,

Sandstone Quarries,
Additional Lumber Mills,
Additional Planing Mills,
Additional Tanneries,
Cotton Mills, Woolen Mills.

Tredegar and Jacksonville are on the East Tennessee, Virginia & Georgia, the East and West of Alabama and the Blue Mountain Mineral Railways. Ten miles from Anniston, 4 hours from Birmingham, 6 hours from Knoxville, 6 hours from Atlanta.

GREAT OPENING FOR A VARIETY OF SMALL INDUSTRIES.

For Full Particulars Address

J. W. BURKE, Pres't, or GOLDSMITH BERNARD WEST, Cen. Man'gr.

Jacksonville, Calhoun Co., Alabama.

FORT PAYNE, Alabama.

★ COME TO ★

The NEW ENGLAND CITY of the South.

Climate Unsurpassed. Abundance of Pure Water. Drainage Excellent.

No Better Point in the Union For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham.

Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light.

Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated. Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

 Correspondence solicited.

CAPITAL \$5,000,000.

OFFICERS.

President, - - - - -	COL. J. W. SPAULDING
First Vice-President, - - - - -	HON. D. H. GOODELL
Second Vice-President, - - - - -	HON. HENRY B. PEIRCE
Secretary, - - - - -	C. L. T. STEDMAN
Treasurer, - - - - -	F. H. TOBEY
Manager, - - - - -	C. O. GODFREY

BOARD OF DIRECTORS.

HON. D. H. GOODELL, of Goodell Mfg. Co., Antrim, N. H.
HON. HENRY B. PEIRCE, Secretary of State of Mass.
GEN'L SELDEN CONNOR, Ex. Gov. of Maine, Pres. Northern Banking Co., Portland, Maine.
COL. J. W. SPAULDING, Ft. Payne, formerly of Portland, Me.
HON. F. G. JILLSON, Providence, R. I.
HORATIO ADAMS, Boston, Massachusetts.
W. J. CAMERON, Pres. First Nat'l Bank, Birmingham, Ala.
COL. JOHN B. BODDIE, Birmingham, Ala.
W. P. RICE, Pres. Union Investment Company of Kansas City, resides Fort Payne, Ala.

FORT PAYNE COAL & IRON COMPANY, Fort Payne, Ala.

DENISON, TEXAS.

The "Yankee" City of the Southwest,

— AND —

* GATEWAY *

— TO THE —

GREAT STATE OF TEXAS.

The City of Denison presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

DENISON is situated in Northeastern Texas near inexhaustible beds of coal and iron, surrounded by the finest fruit lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The growth of Dennison has been a natural one, the city having reached its present size—16,800 population—in sixteen years.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The first public school in the State was established here, and the city's elegant two and three story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year.

We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works, giving the citizens ample protection against serious loss by fire, and enabling the insurance companies to rate the city first class as to fire hazard. Rate of taxation low.

The city has four miles of street railway, with six miles now building to be operated by steam motor; has two electric light companies and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

A large hotel, to cost \$125,000, is to be erected here this year, and a large steel plant with \$2,000,000 of capital is contemplated.

30,000 bales of cotton were shipped from Denison in 1888. 200,000 baskets of strawber-

ries and several carloads of peaches and other fruits have been shipped to market this season.

The Denison Canning Co., capitalized at \$100,000, has one of the largest canning factories in the country.

A cotton mill company with a capital of \$500,000 is building a 25,000-spindle cotton mill.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory has been increased from a daily output of 15 tons to 30.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

THE DENISON LAND & INVESTMENT COMPANY,

DENISON, TEXAS.

Paid-Up Capital, - - - - - \$1,200,000.

OFFICERS:

W. P. RICE, President.

MILTON H. FRENCH, Vice-President and General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

DIRECTORS:

W. P. RICE,

J. M. FORD,

A. R. COLLINS,

Kansas City, Mo.

Kansas City, Mo.

Denison, Tex.

B. J. DERBY,

PAUL LANG,

M. V. B. CHASE,

Burlington, Vermont.

Oxford, N. H.

Augusta, Maine.

MILTON H. FRENCH, Thomaston, Maine.

A. H. COFFIN, Denison, Texas.

JOS. B. LINCOLN, Boston, Mass.

DALLAS, TEXAS,

OFFERS SPECIAL INDUCEMENTS TO

Manufacturers and Investors.

Dallas has a Population of Over 60,000 People,

And being the commercial and financial center of the richest country in the United States, it affords a large home market for manufactured articles; and being well situated for cheap fuel with abundant raw materials, cheap homes for employees and unsurpassed railroad facilities to all parts of the State and all adjacent States and territories, it is undoubtedly one of the best places for manufacturing in the southwest.

The Dallas Manufacturers' Aid and Improvement Co.

Has been organized for the purpose of promoting manufacturing. The Company has purchased 400 acres of land in North Dallas, near the city limits. This land is elevated, has good drainage and an abundance of fine water, and has ample railroad and switch facilities. A part of this has been set apart to be used as **Sites for Factories**, and a part will be **Platted into Lots**, which will be sold to operatives, or on which houses will be built to be rented to operatives.

The company will take stock in manufacturing enterprises, and will give sites FREE. The company is composed of the leading bankers and merchants, the wealthiest and most progressive citizens of Dallas. With all the natural advantages possessed by this locality, supplemented by the inducements that will be offered by this company, the opportunity presented to manufacturers is an extraordinary one. For information write to the

Dallas Manufacturers' Aid and Improvement Co.

711 Main Street, DALLAS, TEXAS.

"More money is to be made safely in Southern Investments than anywhere else."

HON. WILLIAM D. KELLEY, Penn.

GREAT LAND SALE AT CARDIFF, ROANE COUNTY, TENN.

On the Cincinnati Southern Railroad and Tennessee River.

THE CARDIFF COAL & IRON CO.

(Chartered by the State of Tennessee). CAPITAL \$5,000,000.

HON. B. B. SMALLEY, Burlington, Vt., President.

W. F. RICE, Fort Payne, Ala., Vice-President.

H. C. YOUNG, CARDIFF, TENN., Vice-President.

DIRECTORS:

W. P. RICE, Fort Payne, Ala.; H. C. YOUNG, of Cordley & Co., Boston; DR. J. M. FORD, Kansas City; HON. ROBERT FITCHARD, Chattanooga; CHARLES L. JAMES, of James & Abbott, Boston; HON. J. F. TARWATER, Rockwood, Tenn.; HON. WILLIAM WARNER, Kansas City; T. G. MONTAGUE, Prest, First National Bank, of Chattanooga, Tenn.; HON. JOHN M. WHIPPLE, Claremont, N. H.; HON. CARLOS HEARD, Biddeford, Me.; HON. S. E. PINGREE, Hartford, Vermont; HON. B. B. SMALLEY, Burlington, Vermont.

—WILL HOLD A—

Mammoth Land Sale

Of its city lots at CARDIFF.

APRIL 22nd, 1890, and following days.

EXCURSION TRAINS will be run from New England, leaving Boston Saturday, April 19th. The Cardiff properties are not experimental. The coal and iron have been profitably mined more than twenty years. The location is in the midst of already developed properties. The company owns over 50,000 acres of coal and iron mines and timber lands, situated in the Tennessee counties of Roane, Cumberland and Morgan. Its city of Cardiff contains over 3,000 acres. There is scarcely any industry which cannot find a favorable chance at Cardiff for successful establishment and profit. The development is in charge of men of approved judgement and experience. Excursions to Cardiff for the sale will be arranged from principal cities of the North and West.

Proceeds of sales to be applied to the development of the property by the erection of Iron Furnaces, Coke Ovens, Hotel, Water Works, Motor Line, Electric Lights, Manufacturing Plants, Public Buildings.

A plan will be offered which will enable purchasers to secure lots at reasonable and not speculative prices, the intention being to give patrons of the sale a chance to make a profit, as well as the company. Accommodations will be provided for all attending the sale.

For further information, prospectus, etc., apply to

W. P. RICE, Quincy House, Boston, Mass.

CORDLEY & CO., Bankers, Boston, Mass.

Or to the Company, CARDIFF, (Present P.O. Rockwood, Tenn.) Roane Co., Tenn.

Six Trunk Line Railroads at BESSEMER

In the heart of Mineral Alabama, encircled with hills of Coal, Iron and Limestone Rock.

"The South is the coming El Dorado of American adventure. May the Almighty speed and guide her onward progress!" So wrote the Hon. W. D. Kelley, M. C., of Pennsylvania, a few months ago, and every day brings forth new evidence to prove the correctness of his prediction and to show that without a doubt the South is to be the richest country upon the globe. In climate, soil, mineral and timber wealth, in rivers large and small, in a long seacoast, in abundant rainfall, in healthfulness and in every other advantage that could be asked nature seems to have done her best for this favored land. The wealth in iron and coal is beyond estimate. Of timber there is an unlimited supply, including nearly every variety of hardwoods for woodworking purposes.

Seven Furnaces, output 1890, 250,000 tons; Rolling Mill, 100 tons daily; Fire Brick Works, 25,000 daily; Many Lesser Industries

WHERE
MONEY
WILL
GROW!
Offers Thirty Varieties of Hardwoods
for Woodworking Industries.

11,000 CITY LOTS FOR SALE.

The Bessemer Land & Improvement Co.

this new year, are prepared to deal liberally for the founding of Iron and Woodworking industries in this growing Mining and Manufacturing Center.

H. M. McNUTT,

Secretary.

President.

TEXAS SPRING PALACE.

The Most Unique and Attractive Exhibit
Ever Presented to the Public.



OPENS AT

FORT WORTH, TEX.

MAY 10

Closes May 31, 1890.

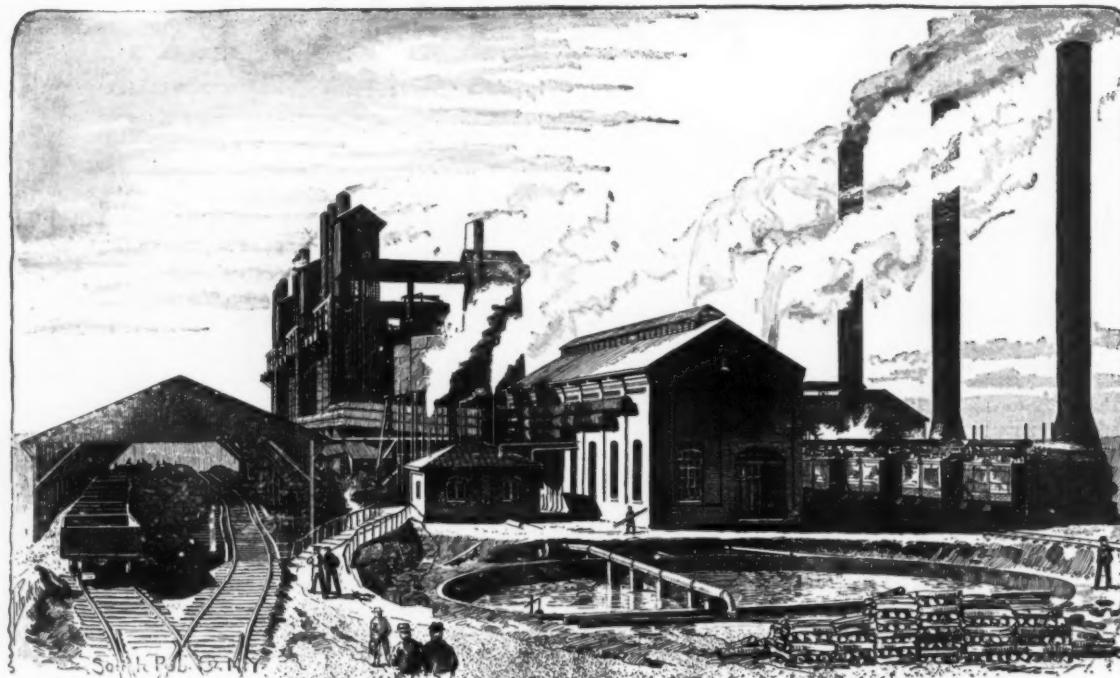
LOW RATES ON ALL RAILROADS.
SEND FOR CIRCULARS.

JNO. F. GROENE, Secretary.

B. B. PADDOCK, President.

SHEFFIELD, ALA.

THE SUPERB.



The following are among the corporate and private enterprises that belong to Sheffield:

- The Sheffield Land, Iron & Coal Co., capital \$1,000,000.
- The Sheffield & Birmingham Coal, Iron & Railroad Co., capital \$1,000,000; the owners of three 150-ton blast furnaces.
- The Birm., Sheffield & Tenn. River Railway Co., capital \$5,000,000.
- The Hattie Ensley Furnace, capital \$200,000.
- The Lady Ensley Furnace Co., capital \$200,000.
- The Electric Light & Gas Fuel Works, \$50,000.
- The Sheffield Ice Co., capital \$25,000.
- The Sheffield Manufacturing & Constructing Co., \$30,000.
- The Sheffield Contracting Co., \$60,000.
- The Eureka Brick & Lumber Co., \$30,000.
- The Howard Brick Co.
- The Sheffield Bakery & Bottling Works.
- The Sheffield Mineral Paint Co., capital \$50,000.
- The Sheffield Agricultural Works, capital \$40,000.
- The Sheffield Cotton Compress Co., \$60,000.
- Millan Brothers, Steam Laundry.
- Enterprise Publishing Co.
- Water Works, already expended, \$30,000.
- Sheffield Street Railway Co., capital \$100,000.
- Cleveland Hotel Co., capital \$50,000.
- Sheffield Hotel Co., capital \$120,000.
- Bank of Commerce, capital \$150,000.
- East Sheffield Land Co., capital \$500,000.
- Hull & Keller's Fern Quarries.
- Mobile Real Estate Co., capital \$50,000.
- Sheffield Real Estate Co., capital \$50,000.
- Sheffield & Mobile Improvement Co., capital \$100,000.
- Sheffield Stove Works.
- Henderson Milling Co., capital \$100,000.
- Globe Iron & Brass Works, capital \$10,000.
- Standard Machine Shop & Foundry, capital \$50,000.
- Owen Pink Mixture Co., capital \$100,000.
- Bell Telephone & Telegraph Co.
- Foulds' Shoe Factory, capital \$20,000.
- Enterprise Wood Working Co., capital \$30,000.
- Buchanan Straw Goods Factory, \$25,000.
- The Sheffield Harness & Saddlery Co., capital \$20,000.
- Principal Shops of the Sheffield & Birmingham Railroad.
- Principal Shops Memphis & Charleston Railroad, now being built.

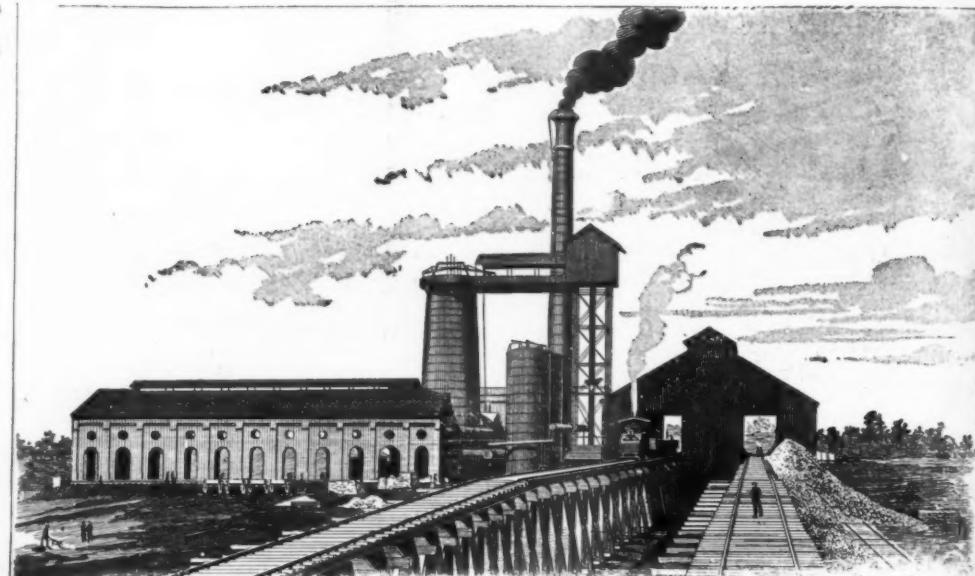
At the Headwaters of Deep Navigation on the Tennessee River, the Hudson of the South.

The Largest Producer of HIGH-GRADE Pig Iron of any City in the Entire Industrial South.

The only point in the South that has or can ship pig iron to the cities on the Mississippi, Missouri and Ohio rivers by boat or barge without rehandling. This last shipment of **5,000 tons of Pig Iron to Pittsburgh, Pa., by barge** was made at a saving of \$2.65 per ton over what any iron-producing city of the South has done or can do to-day.

Five Large Blast Furnaces

Capacity 750 tons pig iron per day.



Aside from the foregoing the following are in course of construction and may be considered positive: Principal Shops of the Memphis & Charleston Railroad; Principal shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad. Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill; Large Machine Shop; A Cotton Mill.

ALABAMA'S IRON CITY.

The Superb Location at the head of navigation on the Tennessee River, commanding the outlet to immense fields of IRON ORE and COAL and magnificent tracts of the finest Timber. Has already attracted to the spot where three years ago in a cotton field her projectors set the stakes of a new city, capital and people, unequalled in amount and number, circumstances considered, by any of the so-called new cities of the South.

With eight Church Organizations, two Free Public Schools, Postoffice, Telegraph and Express offices and abundant facilities of transportation by river and rail. It has every advantage as a residence city that can be desired.

Good Water; Drainage Excellent; Health and Climate Unsurpassed. Free Public Schools and Churches. Splendid opening for men of push and energy. No better point for profitable investment. No "Old Fogey" element here.

Sites for Manufacturing Enterprises

And for Free Public Schools and Churches

Donated by the Sheffield Land, Iron & Coal Company.

Printed information furnished on request. Correspondence solicited. Communications should be addressed

W. L. CHAMBERS,

Vice-President and Manager.

Sheffield Land, Iron & Coal Company,

SHEFFIELD, ALABAMA.

To MANUFACTURERS.

For the Next Sixty Days

BASIC CITY, VA.

Whose Lots and Lands Completely Encompass

The Crossing of the Two Great Coal Carrying Lines of Virginia,

Viz: THE CHESAPEAKE & OHIO RAILROAD, and THE SHENANDOAH VALLEY RAILROAD.

Will offer EXTRAORDINARY INDUCEMENTS for the removal and Establishment of

MANUFACTURING PLANTS.

THE PLAN OF THE

Basic City Mining, Manufacturing & Land Company

is to secure Substantial Industries before placing a single one of its lots on sale, and therefore during the NEXT SIXTY DAYS the Company will Offer to Manufacturers Greater Inducements than any competing town in the South or West.

FOR PARTICULARS AS TO THE SPECIAL ADVANTAGES OF BASIC CITY ADDRESS

SAMUEL FORRER, President and General Manager, BASIC CITY, VA

 Information as to the financial standing and resources of this Company may be had by addressing the AUGUSTA NATIONAL BANK or the NATIONAL VALLEY BANK, of Staunton, Va.

CITY OF GRAND RIVERS, KENTUCKY.

A New Industrial City of the South.

SITUATED upon a narrow strip of land between the Tennessee and Cumberland rivers near their entrance into the Ohio, practically in the Mississippi Valley, forming a system of river transportation unequalled by any location in the South, being by river or rail several hundred miles nearer the great Western markets. The Newport News & Mississippi Valley Railroad runs directly through the Company's coal, iron and city property.

Chief among its resources are its immense banks of brown hematite iron ore, existing in gigantic pockets and showing enormous outcroppings from leads extending over thousands of acres of the Company's lands, assays from which show metallic iron 50 to 66 per cent, with practically no phosphorus or sulphur.

Pig iron can be laid down in Pittsburgh from Grand Rivers, by reason of its river system of transportation, \$2.50 per ton cheaper than from Birmingham, Ala.

The quantity of coal upon the Company's lands is practically inexhaustible, its measures, eleven in number, ranging from four to seven feet in thickness, and available upon nearly all of the three thousand acres of the Company's coal lands. This coal has been found to possess superior qualities as a coking, steaming or domestic coal.

As a manufacturing center Grand Rivers has no equal in the South. The saving to the manufacturer from its cheap

rates of freight and cheap coal will prove a source of profit equal to a liberal dividend upon his invested capital.

The Company own 21,000 acres coal, iron ore and timber lands convenient to its furnaces, together with 3,000 acres city lands situated upon the banks of both rivers.

Surveys are nearly completed, and the streets are being graded. Industries of various kinds are now locating their plants and in a short time there will be seen a rapidly growing and substantial city.

A building association has been formed for the erection of permanent brick buildings for business purposes and dwellings, operations upon which have already commenced. A bank is being organized. Two large charcoal furnaces are under contract, and numerous other industries in contemplation.

Thus, with ample capital, Northern enterprise and good management, Grand Rivers will take a prominent position in the great manufacturing cities of the South.

The Company offer the most liberal encouragement to manufacturers wishing to establish plants there, and will give to them every facility in their power to make their enterprises successful.

The city lands are now being platted, streets graded, and everything put into an attractive condition for visitors and investors.

FOR INFORMATION, PRINTED MATTER &c., ADDRESS

BROWN, RILEY & CO., BANKERS, 9 Congress St., Boston, or GRAND RIVERS COMPANY,
Grand Rivers, Livingston County, Kentucky.

CAPITAL - - - \$3,000,000.

PRESIDENT, - - - ARETAS BLOOD, Manchester, N. H.
VICE-PRESIDENT, - - W. W. SMITH, Nashville, Tenn.

ATTORNEY, - - - JAMES NORFLEET, Grand Rivers, Ky.
SEC'Y & TREAS., - - JAMES L. HALL, Kingston, Mass.

BOARD OF DIRECTORS:

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BENJAMIN DORE, Lynn, Mass.
S. J. WINSLOW, Pittsfield, N. H.

ISAAC REESE, Nashville, Tenn.
H. L. LAWRENCE, Arlington, Mass.
THEO. PLUMMER, Nashville, Tenn.
J. NORFLEET, Fort Payne, Ala.

J. F. BROWN, Boston, Mass.
T. B. JONES, Chelsea, Mass.
W. W. SMITH, Nashville, Tenn.

W. C. CUTLER, Chelsea, Mass.
A. H. BREED, Lynn, Mass.
JAMES L. HALL, Kingston, Mass.

MIDDLESBOROUGH,

* KENTUCKY *

"The Wonder of the Age in Town Building."

The Future Iron and Steel Center of America.

THE PASSAGEWAY FOR RAILROADS BETWEEN THE WEST AND THE EAST.

A SOURCE OF COKE SUPPLY FOR THE SOUTH AND WEST.

THERE ARE NOW UNDER CONTRACT:

A Basic Steel and Iron Plant, daily capacity 300 tons, to cost \$1,000,000 and to employ about 1,000 hands.

An Iron Rod Mill; A Sheet Mill; A Nail Mill.

Two Coke Iron Furnaces, 150 tons daily capacity each, and one Charcoal Furnace.

A \$500,000 Tannery—the largest in the world

Fourteen Coal Mining Enterprises, to employ about \$2,000,000 capital.

A Dozen Wood-Working Enterprises.

A Twelve-Mile Belt Railroad.

Tile Works, Fire and Building Brick Works, and a dozen or more other enterprises.

\$18,500,000

Already Invested In the Development of Middlesborough.

Other New Industries are Being rapidly added to those already in operation and contracted for.

COAL, IRON, TIMBER
AND OTHER RAW MATERIALS.

DELIGHTFUL AND HEALTHFUL MOUNTAIN CLIMATE,

WHERE MALARIA AND THROAT AND LUNG TROUBLES ARE UNKNOWN.

Elevation from 1,300 to 2,400 feet above the Sea Level.

SURROUNDED BY VALLEYS OF RICH AND PRODUCTIVE FARM LANDS.

SEND FOR CIRCULARS, PROSPECTUS, MAPS, ETC., TO

MIDDLESBOROUGH TOWN COMPANY,

MIDDLESBOROUGH KY.

ROANOKE, VA.

SCOTT & RIVES,
REAL ESTATE AGENTS.

Now is the Time to INVEST in ROANOKE REAL ESTATE

Over One Million Dollars

Has recently been invested in INDUSTRIAL ENTERPRISES which are in SUCCESSFUL OPERATION. Capitalists from all sections of the country are invited to investigate the unequalled advantages of our city, and to bear in mind that

No Investor in Roanoke Real Estate has ever Lost a Dollar.

There is a great demand for houses of all classes and parties who will invest their money in that way can rest assured of realizing from ten to fifteen per cent.

POPULATION IN 1880 WAS 400, AND IN 1890 IS 20,000.

We will be glad to give information in regard to Roanoke, and solicit correspondence.

CHARLOTTESVILLE, VA.

OFFERS

Great Advantages and Liberal Inducements to Manufacturers

DESIRING TO LOCATE SOUTH.

Railroad Facilities, Cheap Rates and Rapid Transportation to all Points Unexcelled.

PERFECT CLIMATE. UNLIMITED SUPPLY OF EXCELLENT WATER.

Gas, Electricity and Street Railway. Free Schools and Churches. Different Lines of Manufacturing Enterprises Already in Successful Operation Here.

A LIVE AND GROWING PLACE.

HOME CAPITAL WILL JOIN IN THE ESTABLISHMENT AND OPERATION OF FACTORIES.

COME AND SEE, OR WRITE TO JOHN M. WHITE, President.

CHARLOTTESVILLE INDUSTRIAL & LAND IMPROVEMENT CO., Charlottesville, Va.

Morristown, Tenn.

The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Ray's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants. It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of uncultivated forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. *The Celebrated East Tennessee Marble* underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsburg coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



MAP SHOWING RELATION OF MORRISTOWN TO THE COUNTRY AT LARGE.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

Persons who may desire fuller information can obtain it by calling on or addressing

MONTVUE LAND COMPANY
POSTOFFICE BUILDING, — MORRISTOWN, TENNESSEE.

BEDFORD CITY,

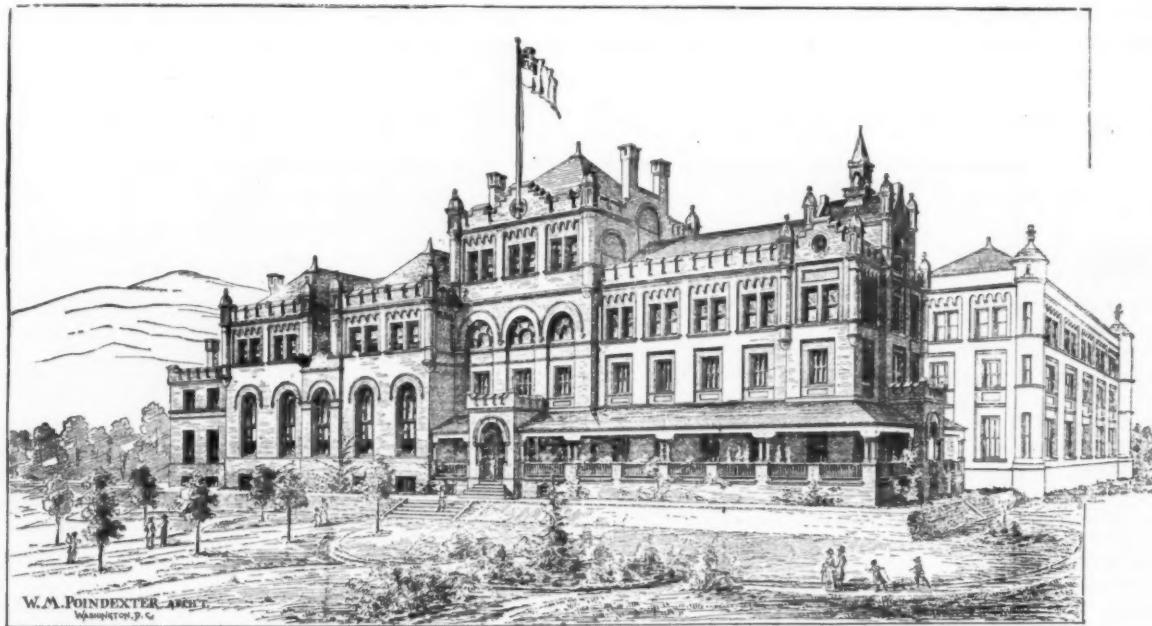
(FORMERLY LIBERTY.)

On the line of the Norfolk & Western Railroad, and soon to be one of the principal points on the Pittsburgh Southern (which shortens the distance between Pittsburgh and Atlanta from over a THOUSAND miles to LESS than SEVEN HUNDRED, and will open up some of the Richest Mineral Lands in the world) offers to Manufacturers, Investors, Prospectors and Seekers for Homes, Health, Wealth and Happiness, every inducement mind or pocket could wish.

A Country Rich in Ores and Mineral Deposits.

AMPLE RAILROAD FACILITIES AND FAIR RATES.

—A Delightful and Healthful Climate.—



RANDOLPH MACON ACADEMY.
LIBERTY, VA.

RICH AND PRODUCTIVE SOIL,

ESPECIALLY ADAPTED TO FRUITS AND FINE VEGETABLES.

ALL THE LOCAL INDUSTRIES ARE WELL ESTABLISHED AND MAKING LARGE PROFITS:

Woolen Mill, Tobacco Factories, Roller and Steam Flouring Mills, Foundry and Plow Works, Cigar Factories, Planing Mill, Electric Light Plant, Fox Factory, Tobacco Warehouses, &c.

NEW INDUSTRIES CONTRACTED FOR AND MACHINERY ORDERED ARE:

Brosius Steel & Iron Mfg. Co., R. W. Coffee Machine Co., (to manufacture the best invention of the decade, a Leaf-Tobacco Stemmer,) a Broom Factory, Ice Plant, &c.

FOR FURTHER INFORMATION, SITES, &c., APPLY TO

Bedford City Land & Improvement Co. Longwood Park Land & Improvement Co.

BEDFORD CITY, VA.

WANTED.

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—AT—

WINCHESTER, KY.

A City of Eight Thousand Inhabitants.

Builders of Water Works and Hydraulic Engineers are invited to come to Winchester and inspect the various sources of supply with a view to utilizing the most available.

Propositions based on such inspection are to be submitted to the Mayor and City Council of Winchester on or before May 1st, next,

F. P. PENDLETON,

Mayor of Winchester, Ky.

THE CARDIFF
Coal & Iron Co.

Organized by W. P. RICE with a
CAPITAL OF \$5,000,000.

Proposes to build an Industrial City at

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TENNESSEE.

A Public Sale of Lots

Will be held on

Tuesday, April 22.

Don't Fail to be There.

OXFORD, N. C.

The Capital of Granville County. Situated on three railroads, to which a fourth is in process of construction.

THE COSMOPOLITAN TOWN OF THE SOUTH
Invites immigration to her hospitable borders.

A family living in Oxford educates boys and girls at home and never flees to the mountains or coast in summer to escape malaria, thus saving thousands to the head of the family. Mark well its points.

POINTS.—It was founded in 1770 by Jesse Benton, father of Hon. Thomas H. Benton, yet it is the newest town in the State, having twice doubled its population in past 10 years.

EDUCATIONAL.—It has a large military school and two excellent female colleges, one daily and three weekly papers.

FINANCIAL.—Its taxable property is about \$2,000,000, its population 4,000. It has opera and market house, two excellent banks with ample capital.

INDUSTRIAL.—It sells eight million pounds of tobacco a year in five mammoth brick warehouses; has four extensive tobacco factories, forty or more leaf factories, two iron founders, three carriage factories, sash and blind factory, electric-light plant, four hotels, a broom factory, steam flouring mill, cigar factory. The noted Kimball Tobacco Company, of Rochester, N. Y., after surveying the whole tobacco field, selected Oxford as a spot to locate its North Carolina business, and are about to erect a third mammoth building.

RELIGIOUS.—Four churches in its midst.

CHARITABLE.—It boasts of the Oxford Orphan Asylum, two hundred and fifty children well cared for; also lodges of Odd Fellows and Masons.

CLIMATE.—It furnishes that equable climate that delights denizens of the North. Annually hundreds come to kill quail in its adjacent fields, or seek health from its pure hilly air and mountain water. It has no chills and fever, no malaria nor epidemics.

IT'S BACK COUNTRY AND FUTURE.—Minerals in great richness and abundance fill the soil of Granville. Copper, iron, gold and silver abound. Capitalists from New York and Pennsylvania and elsewhere are working the mines to great advantage. Its farmers make that smooth, bright, waxy tobacco that only the generous soil of Granville vouchsafes to man—tobacco that improves, like old wine, with age and is shipped with impunity through the humidity incident to an ocean voyage; and that caused Count Bunsen to exclaim that Granville county tobacco was "the finest on earth, free of nicotine." These tobaccos are the highest priced to be found anywhere, bringing often \$1.00 per pound in the leaf.

Nestled in the hills of Granville, a very Arcadia, and ideal home among people busy, yet having hearts, awaiting with open arms the coming citizen. Riots are unknown, and there are no race problems to solve.

ACCESSIBILITY.—Oxford is only two hours from Raleigh, four hours from Richmond, Va., and five hours from Norfolk, Va.

For further information address the Secretary of the Commonwealth Club, Oxford, N. C.

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Future Manufacturing and Commercial Center
OF THE
GREAT SOUTHWEST.

DENISON SUPPLIES THE COAL FOR TEXAS.

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DENISON has an abundant supply of pure, soft water and plenty of good, cheap BUILDING MATERIAL.

The attention of investors and those seeking advantageous locations for business or for manufacturing plants is invited to the opportunities presented at Denison.

MUNSON & BRO. HAVE SUPERIOR FACILITIES FOR THE SAFE AND PROFITABLE INVESTMENT AND HANDLING OF CAPITAL.

For information about DENISON and for bargains in BUSINESS and RESIDENCE PROPERTY, ACRE PROPERTY and FARMS NEAR THE CITY, write or call upon

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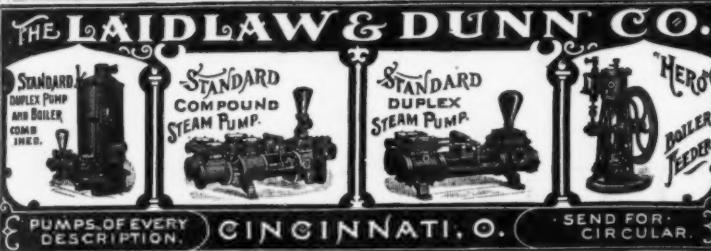
11 WOODWARD STREET,

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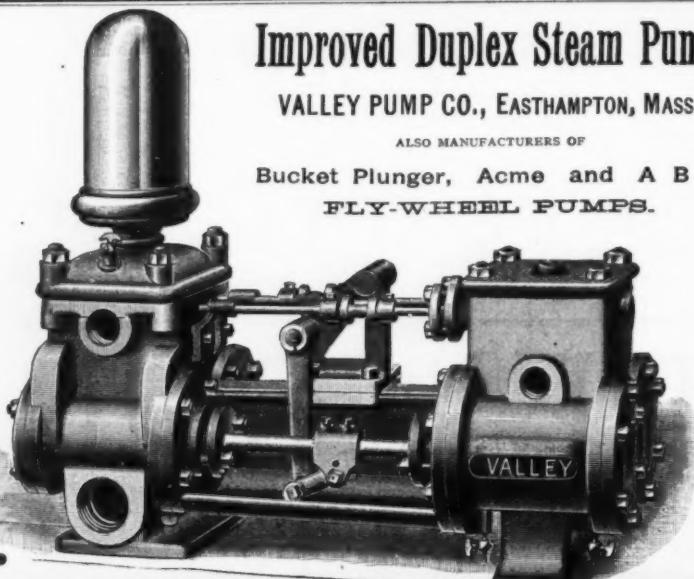


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TURBINE WATER WHEELS, Vertical and Horizontal.

IRON FLUMES and PENSTOCKS, HEAD GATE GEARING, REGULATORS and everything pertaining to Water Wheels and Mill Work.

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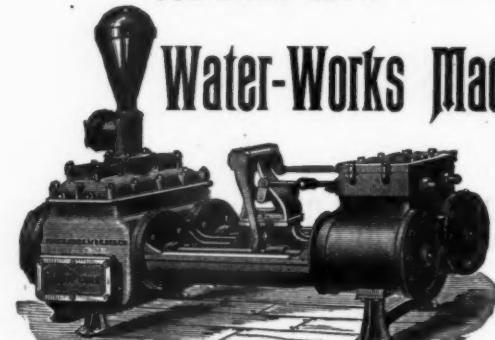
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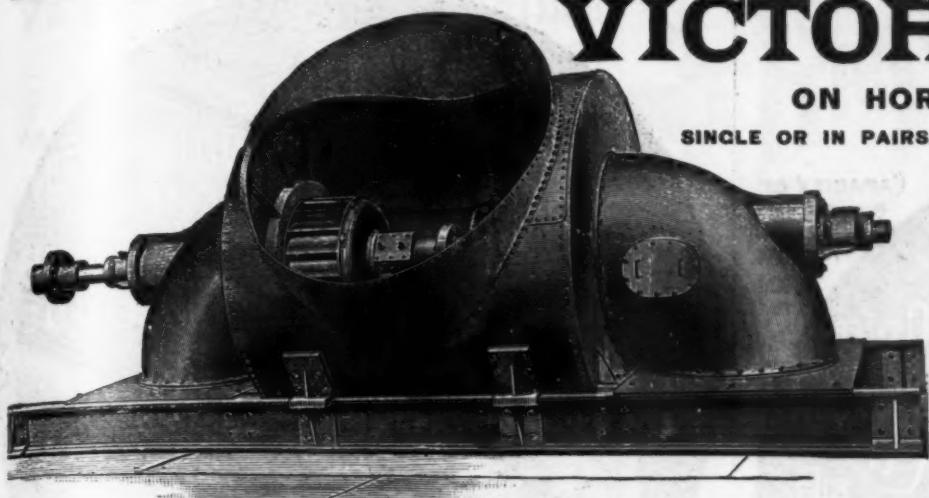
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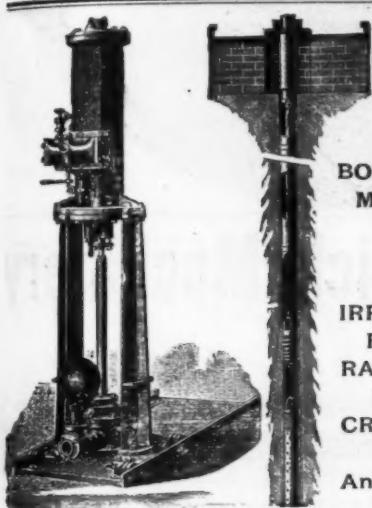
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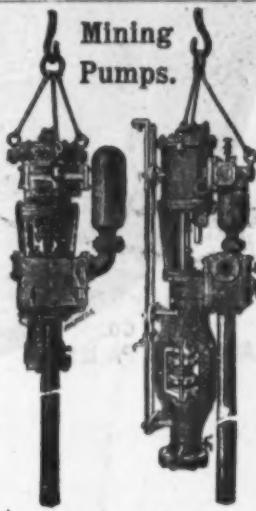
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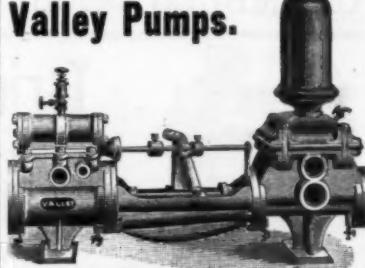
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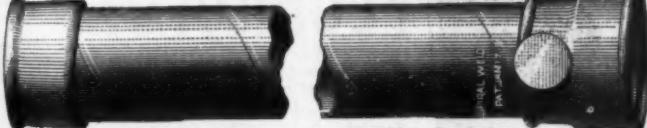
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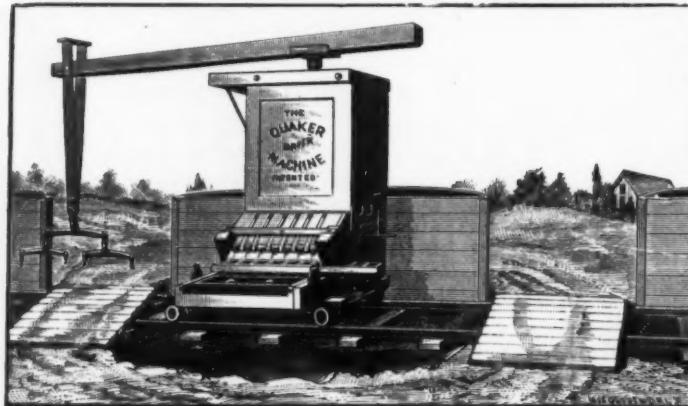


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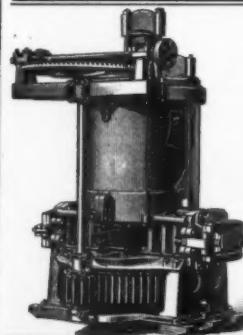
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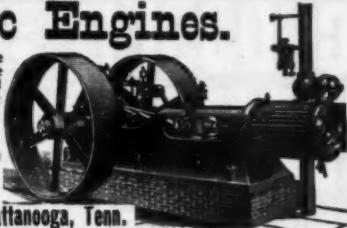
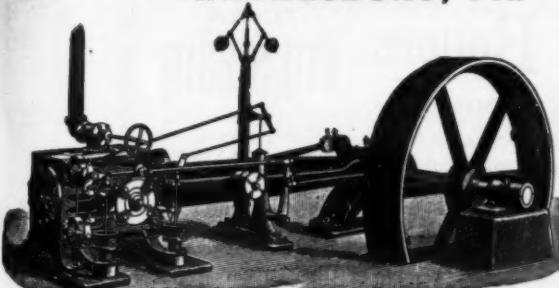
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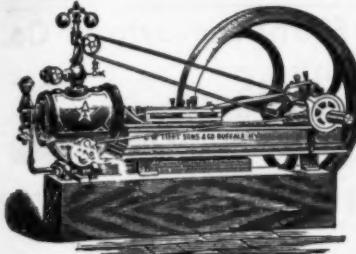
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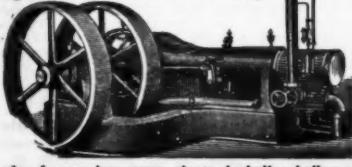
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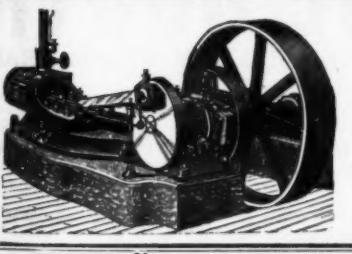


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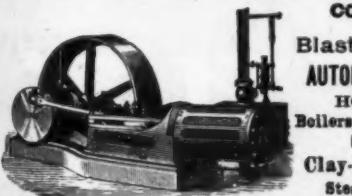
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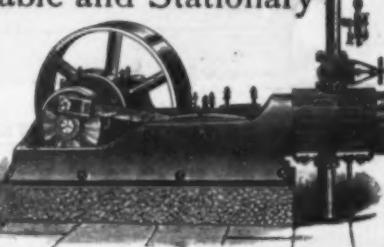
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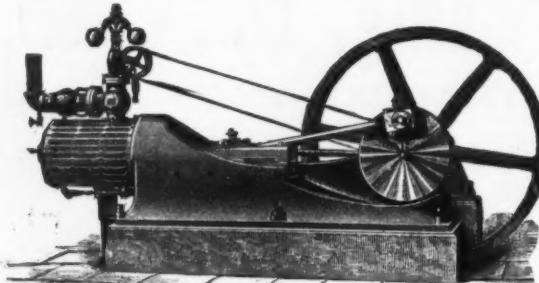
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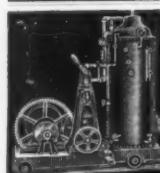
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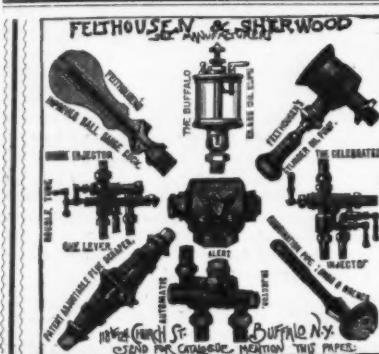


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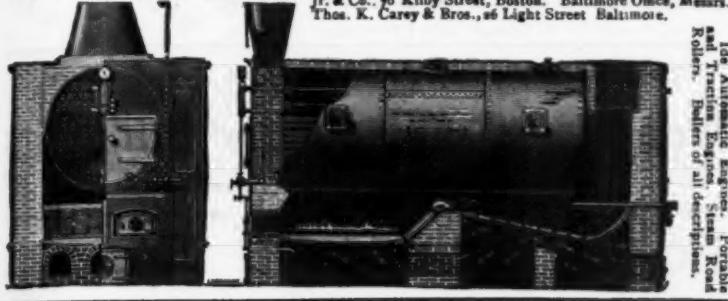
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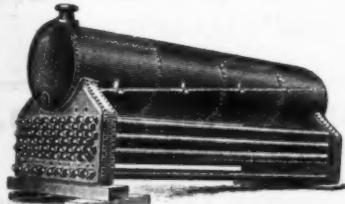
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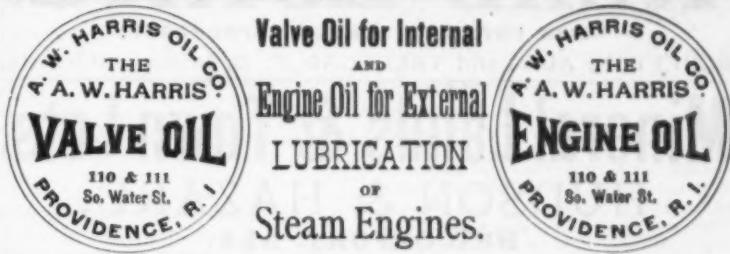
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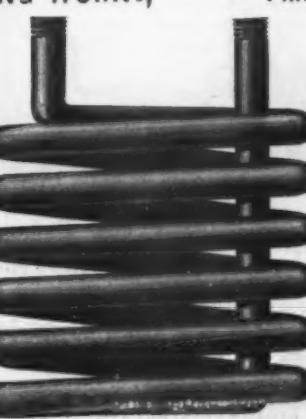
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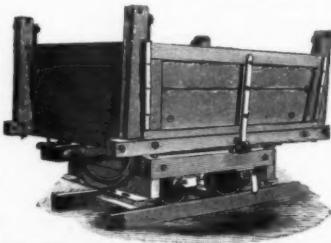
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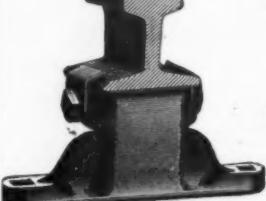
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Railroad Construction

Aberdeen, Miss.—Railroad.—The city has been asked to issue \$50,000 of 20-year bonds to aid the Mississippi River, Alabama & Chattanooga Railroad Co. in the construction of its projected road lately mentioned. W. L. Chambers, of Sheffield, Ala., is president of the company.

Albany, Ga.—Railroad.—It is reported that surveys will be commenced on the South Georgia & Florida Railroad, projected to Tampa, Fla., via Quitman and Madison and Seminole, Fla. Joseph Tillman, Quitman, Ga., can give information.

Albany, Ga.—Dummy Railroad.—The Albany Improvement Co., mentioned elsewhere in this issue, has been organized and contemplates constructing a dummy railroad.

Alexandria, Va.—A meeting of the stockholders of the Washington Southern Railroad Co., mentioned last week, will be held on April 30 to decide as to the issuance of a mortgage of \$2,500,000.

Ashland, Ky.—Street Railroad.—It is said that the syndicate mentioned elsewhere in this issue as organized by John F. Hager, Claude M. Thomas, S. M. Buckner, Grant Green and A. C. Campbell have charter for a street railroad which, it is said, will be built within 60 days.

Augusta, Ga.—Cable Railroad.—Ernest Groesbeck and others, mentioned last week as to improve property opposite Augusta, on the Savannah river, will, it is stated, construct a cable railroad.

Baltimore, Md.—Railroad.—The Baltimore, South Baltimore & Curtis' Bay Railway Co., lately mentioned, has been incorporated.

Baltimore, Md.—The stockholders of the Baltimore & Ohio Railroad Co. have confirmed the lease of the West Virginia & Pittsburgh Railroad Co. to the former company, and also the mortgage from the latter company to the Mercantile Trust & Deposit Co. for \$4,000,000, both mentioned three weeks ago.

Baltimore, Md.—The bills, previously referred to, providing the mode of construction of the Western Maryland Tidewater Railroad, and giving leasing powers to the Western Maryland Railroad Co. as portion of the extension project, have become laws.

Barnardsville, Ky.—Street Railroad.—The Barnardsville Land & Improvement Co. will construct several miles of street railroad.*

Birmingham, Ala.—The Ensley Railway Co., the Birmingham Union Railway Co. and the Bessemer & Birmingham Railway Co. will each hold stockholders' meeting on May 5 to consider the question, lately referred to, of the consolidation of the three companies together with the Birmingham Electric Co.

Buchanan, Va.—Railroad Bridge.—The Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) and the Virginia Western Railroad Co., previously referred to, will, it is stated, construct a bridge across the James river.

Burkesville, Ky.—Railroad.—Surveys will, it is reported, be commenced shortly on the Burkesville & Northwestern Railroad. W. E. Alexander, president, can give information.

Cairo, W. Va.—Railroad.—The Cairo & Kanawha Valley Railroad Co., previously referred to, states that it intends constructing a railroad to the south fork of the Hughes river during the summer, a distance of 17 miles.

Chattanooga, Tenn.—Railroad.—Contract is said to have been signed for the construction of the Chattanooga Southern Railroad, mentioned last week, from Rock Creek to Gadsden, Ala., distance of about 80 miles. It is said to be the company's intention to construct a line to the Gulf of Mexico by the shortest possible route. J. W. James, president, can give information.

Chattanooga, Tenn.—The question of voting a \$100,000 subscription to the Chattanooga, Rome & Columbus Railroad Co. (office, Rome, Ga.), which was carried some time ago, is to be remanded for a second vote. The new act calls for the issuance of \$100,000 of 5 per cent. 30-year bonds, not to be paid to the railroad company until the latter shall have built and equipped shops in Chattanooga costing not less than \$100,000.

Chattanooga, Tenn.—Railroad.—The Chattanooga & Georgia Railway Co. has been chartered.

Cleveland, Tenn.—Railroad.—A railroad is projected to Hiawassee Gap.

Denton, Md.—Railroad.—Caroline county has been authorized to subscribe \$60,000 to the Delaware & Chesapeake Railroad Co., lately reported.

Durham, N. C.—Railroad.—Surveys are reported as being made for the further extension, south of Durham, of the Lynchburg & Durham Railroad (company's office, Lynchburg, Va.).

Elkins, W. Va.—Lumber Railroad.—It is said that capitalists are considering the advisability of constructing a lumber railroad up Chenoweth's creek to Cheat river, and up Pond Lick to the "Sinks."

Eutawville, S. C.—Railroad.—Robert S. Pringle, of Summerville, is reported as having secured contract for the construction of the branch of the

Charleston, Sumter & Northern Railroad, previously mentioned as to extend to Pond Bluff.

Fayetteville, N. C.—Railroad.—It is said that work will commence shortly on the extension of the Wilson & Fayetteville Branch of the Wilson & Weldon Railroad Co. (office, Wilson).

Frankfort, Ky.—Bills are before the legislature to incorporate the Corydon & Princeton Railroad Co.; to incorporate the Lebanon Street Railway Co.; to incorporate the Jellico, Beattyville & Ashland Railroad Co.

Gadsden, Ala.—Dummy Railroad.—Work will at once be commenced on the extension, previously referred to, of the dummy railroad of the Gadaden Land & Improvement Co.

Gadsden, Ala.—Railroad.—A railroad is talked of to extend to Shelby via Riverside. A. L. Woodleff or R. J. Randall can give information.

Greenville, S. C.—Street Railroad.—The Street Railway Co. will, it is stated, extend its lines.

Greenville, Tenn.—Railroad.—The construction of a railroad to extend to Jonesboro is contemplated. Surveys are being made.

Griffin, Ga.—Ross & Tench are reported as having received contract, lately referred to, for furnishing field rock for ballasting the track of the Central Railroad & Banking Co. of Georgia (office, Savannah) between Atlanta and Macon.

Hagerstown, Md.—Street Railroad.—The Hagerstown Street Railway Co., previously referred to, has been incorporated.

Huntsville, Texas—Railroad.—The construction of a railroad to extend to Navasota is being talked of. T. H. Ball can give information.

Knoxville, Tenn.—Official announcement is said to have been made in New York city of the purchase of the system of railroads comprised in the Queen & Crescent Route by the East Tennessee, Virginia & Georgia Railway Co. for \$5,500,000. The latter company will hold a meeting on April 15, as was stated in the issue of February 22, partly for the purpose of considering this purchase.

Laredo, Texas—Railroad.—The construction of a railroad to extend to Brownsville is being discussed.

Laurel, Md.—Street Railroad.—The Washington & Laurel Traction Co., previously mentioned, has been incorporated.

Little Rock, Ark.—It is said that H. G. Allis, representing St. Louis (Mo.) parties, has purchased for \$300,000 the property of the Little Rock & Citizens' Street Railroad Co., comprising 13½ miles of street railroad, together with equipment, etc.

Lynchburg, Va.—Electrical Railroad.—It is said that a New York syndicate has made a proposition to construct an electrical street railroad to West Lynchburg if right of way is given.

Machen, Ga.—Railroad.—It is said that the Middle Georgia & Atlantic Railroad Co. will construct an extension at once to Covington, a distance of about 20 miles.

Macon, Ga.—Railroad.—The organization of a construction company for the purpose of building the projected railroad to Dublin is being discussed. Dudley Hughes, W. E. H. Stearcy, B. M. Milner, H. S. Morse and others are interested.

Magnetic City, N. C.—Railroad.—The Roane Mountain Steel & Iron Co. intends, it is stated, to construct a railroad about 12 miles in length to a connection with the Charleston, Cincinnati & Chicago Railroad.

Maysville, Ky.—Electrical Railroad.—It is reported that the Maysville Street Railroad & Transfer Co. will adopt electric traction on its line, 3½ miles in length.

Montgomery, Tenn.—Tram-road.—The Emory River Boom & Lumber Co. will construct a 3-mile tram road.

Monticello, Fla.—Railroad.—The Monticello & Tampa Air Line Railway Co. has been organized with a capital stock of \$100,000 for the purpose of constructing a railroad to Tampa. J. H. Perkins, E. B. Bailey, J. S. Denham, T. B. Simpkins and others are interested.

Natchez, Miss.—The Natchez, Jackson & Columbus Railroad Co. will hold a stockholders' meeting on April 15 to act upon the proposed ratification of the sale of its property, etc., lately referred to, to the Louisville, New Orleans & Texas Railway Co. (office, Memphis, Tenn.)

Ocala, Fla.—Railroad.—It is said that the Florida Central & Peninsular Railway Co. (office, Jacksonville) will construct a railroad to Dunnellon.

Pulaski City, Va.—Dummy Railroad.—The Pulaski Street Railway Co., lately mentioned, will soon commence work on its dummy railroad. Entire equipment will be purchased. L. S. Calfee can give information.*

Raleigh, N. C.—Railroad.—Surveys are reported as being made for the further extension, south of Durham, of the Lynchburg & Durham Railroad (company's office, Lynchburg, Va.).

Richmond, Va.—Lumber Railroad.—It is said that capitalists are considering the advisability of constructing a lumber railroad up Chenoweth's creek to Cheat river, and up Pond Lick to the "Sinks."

Eutawville, S. C.—Railroad.—Robert S. Pringle, of Summerville, is reported as having secured contract for the construction of the branch of the

Charleston, Sumter & Northern Railroad, previously mentioned as to extend to Pond Bluff.

Fayettleville, N. C.—Railroad.—It is said that the deed is to secure the payment of \$2,000,000 of bonds, previously reported, for improvements, double tracking, etc.

Rockport, Texas—Railroad.—The St. Joseph Railway Co. has been organized with a capital stock of \$100,000 by R. H. Wood, S. B. Allyn, John Ireland and others. The company contemplates constructing from the main land to the Aransas Pass via St. Joseph's Island.

Rogers, Ark.—Railroad.—The St. Louis & California Railway Co. has filed articles of incorporation with the Secretary of State at Little Rock; capital stock \$100,000. The company contemplates constructing a 35-mile railroad from Rogers and extending in a westerly direction to the Arkansas State line via Bentonville and Fifteen Mile Post. H. L. Morrill, E. J. Smith, E. D. Kenna, of St. Louis, Mo.; W. H. H. Clayton, James Brizzolari, W. A. Thomas, of Fort Smith, and R. B. Davidson, of Fayetteville, are the incorporators.

Rome, Ga.—Railroad.—It is said that the Rome Mineral Railroad Co. will at once construct a railroad to Ringgold.

Savannah, Ga.—Railroad.—The Savannah Construction Co. has been organized by M. Brown, J. H. Parker, Frank Hambleton, B. Cohn, B. A. Dimmick and others for the purpose of constructing the projected Southbound Railroad,

previously referred to, which is to extend to Columbia, S. C., via Barnwell, S. C.; capital stock \$500,000.

Scivern, S. C.—Railroad.—The extension of the Blackville, Alston & Newberry Railroad (company's office, Charleston) is being discussed.

Sheffield, Ala.—Railroad.—A. Mitchell, chief engineer, will receive proposals for grading, clearing and grubbing on 10 miles of the Birmingham, Sheffield & Tennessee River Railroad Co. from Marguerite to Chickasaw.

Upper Marlboro, Md.—Electrical Railroad.—The Washington & Marlboro Electric Railway Co., lately mentioned, has been incorporated.

Walterboro, S. C.—Railroad.—Formal contract for the construction of the Walterboro & Vemassie Railroad, lately referred to, has been awarded to the Walterboro Construction Co., recently mentioned as incorporated.

Washington, D. C.—A bill is before Congress incorporating the Washington & Great Falls Electric Railroad Co. for the purpose of constructing an electric railroad from Georgetown to Great Falls. G. Vanderwerken, A. B. Greenwall, Smith Pettit, J. L. Barbour and others are the incorporators.

Washington, D. C.—A bill has been introduced into Congress to incorporate the Georgetown Union Bridge & Railway Co. for the purpose of constructing an iron bridge across the Potomac river on the piers of the present Free Bridge. The company is also authorized to lay railroad tracks. G. G. Boteler and J. E. Clements, of Virginia; George W. Cissell, G. J. Johnson, L. O. DeLashmutt, L. D. Wine and T. E. Roessel, of the District of Columbia; O. Horsey and D. C. Winebrenner, of Baltimore, Md., and others are the incorporators.

Washington, Ga.—Railroad.—A committee composed of T. B. Green, F. H. Colley and M. P. Reese has been appointed to endeavor to secure the construction of a railroad to Elberton, by either the Richmond & Danville Railroad Co. (office, Richmond, Va.), or the Georgia, Carolina & Northern Railroad Co. (office, Raleigh, N. C.)

Building Notes.

Albany, Ga.—Hotel, etc.—The Albany Improvement Co., mentioned elsewhere in this issue, has been organized, and contemplates among other projects erecting a hotel and the opera-house previously reported.

Americus, Ga.—Plans have been prepared and work will be commenced shortly on the new city hall, previously referred to; cost \$25,000. P. H. Williams, chairman building committee, can give information.

Americus, Ga.—The Macon Door, Sash & Lumber Co., of Macon, is reported to have secured contract for the erection of the Baptist church previously referred to, its bid being \$23,232.

Anderson, S. C.—It is stated that the Columbia & Greenville Railroad Co. (office, Columbia) and the Central Railroad & Banking Co. of Georgia (office, Savannah, Ga.) will erect a union depot.

Anniston, Ala.—The Alabama Security Bank is reported as to erect a three-story bank building.

Anniston, Ala.—Stafford Weill, of New York city, will, it is reported, erect a three-story block.

Athens, Ga.—Clarke county is talking of erecting a new courthouse.

Atlanta, Ga.—The Concordia Building Association has been chartered by Aaron Haas, Isaac Lieberman, Jr., Jacob Elsas and others for the purpose of erecting a building for the Concordia Association; capital stock not less than \$25,000 or more than \$100,000.

Augusta, Ga.—Hotel.—The Hotel Bon Air Co. has decided, it is said, to issue \$150,000 of bonds

for the purpose of paying indebtedness and improving the Hotel Bon Air, lately mentioned.

Augusta, Ga.—Hotel.—Ernest Groesbeck and others, of New York city, mentioned last week as having purchased land on the Savannah river opposite Augusta, will, it is stated, erect a hotel on the property.

Austin, Texas.—J. S. Clark & Co., of Louisville, Ky., have secured contract for erecting the Alamo Monument, previously reported.

Baltimore, Md.—Henry Smith & Son have secured contract for the erection of the club-house previously reported as to be built by the Maryland Club. Their bid was \$116,700. The building is to be built of Baltimore county marble, and is to be completed by July 1, 1891. James Sloan, Jr., of the building committee, can give information.

Baltimore, Md.—Permits have been issued to S. T. Shipley for the erection of 7 two-story dwellings; to F. O. Singer, Jr., for 23 two-story dwellings; to Henry Kluter, for 7 two-story dwellings.

Birmingham, Ala.—Permit has been granted to E. Erswall for the erection of a three-story brick building to cost \$22,000.

Blackstock, S. C.—It is reported that a new academy building will be erected in place of the one recently destroyed by storm.

Boston, Ga.—The Boston Alliance Warehouse Co. has been organized by J. M. Rushing, P. Q. Moody, J. C. Stanaland and others. The company intends erecting a warehouse.

Bristol, Tenn.—W. W. James will, it is stated, erect a bank and storehouse building three stories in height and 50x100 feet in size.

Buena Vista, Va.—The Shenandoah Valley Railroad Co. (office, Roanoke) will, it is said, erect a depot.

Carrollton, Ky.—A branch of the National Building Association of Louisville has been organized with W. F. Howe, president. The Savings & Loan Association has also been organized by J. E. Grobmyer, W. F. Howe, H. Schuerman and others.

Charleston, S. C.—Hotel.—It is reported that a hotel will be erected on the site of the American Hotel. John H. Devereux can give information.

Charleston, S. C.—The First Baptist congregation is contemplating the erection of a new church.

Charleston, S. C.—Hotel.—A hotel to be erected on Sullivan's Island is being talked of.

Chattanooga, Tenn.—The Delta Tau Delta Fraternity intends erecting a chapter-house on Lookout Mountain to cost \$5,000. E. C. Goodpasture can give information.

Chattanooga, Tenn.—W. L. Floyd has prepared plans for a three-story hall to cost \$10,000.

Columbus, Ga.—Hotel.—It is said that a syndicate will erect a \$50,000 hotel at a place called Lover's Leap.

Conway, Ark.—Hendrix College, lately mentioned, will erect several brick and stone buildings; main one 125x60 feet, and three stories high. A. C. Millar, of Altus, president, can give information.*

Corsicana, Texas.—Work will soon be commenced on the \$10,000 church to be erected by the Cumberland Presbyterian congregation.

Cynthiana, Ky.—Hotel.—It is rumored that a syndicate will soon erect a hotel to cost \$50,000.

Dallas, Texas.—The Masons are considering the erection of a temple to cost \$200,000.

Dallas, Texas.—Padgett Bros. have purchased site for the erection of a five-story building.

Dallas, Texas.—Gano Bros. have purchased site for the erection of a six-story office building.

Dallas, Texas.—It is said that the Gulf, Colorado & Santa Fe Railway Co. (office, Galveston) contemplates erecting a depot.

Dawson, Ga.—A. J. Baldwin & Co. will erect a storehouse.

Durham, N. C.—Raleigh, on securing the Bapst Female College previously mentioned, relinquished her claim to Trinity College, which was to be located at that place. Durham has now secured the latter college and has donated property and money to the amount of \$115,000.

Payetteville, Tenn.—The Lincoln County Building & Loan Association has been chartered.

Florence, Ala.—Altiger & Golightly have secured contract for the erection of the high school building previously mentioned for \$14,444.

Fort Payne, Ala.—It is reported that a three-story brick and stone block 125x80 feet will be erected.

Fort Worth, Texas.—A branch of the Southwestern Building & Loan Association has been organized with J. I. Clements, president, and M. S. Davis, secretary and treasurer.

Franklin, Va.—Hotel.—Contract for the erection of the hotel previously referred to is said to have been awarded to E. Patterson, of Suffolk, for \$7,810.

Gainesville, Ga.—The Masons are reported as contemplating the erection of a temple.

Gillespie, Va.—Hotel.—A \$50,000 hotel is being erected.

Greenville, Ala.—Hotel.—It is said to be probable that a hotel will be erected.

MANUFACTURERS' RECORD.

Greenwood, S. C.—A branch of the Southern Building & Loan Association of Atlanta, Ga., has been organized with B. W. Cobb, president, and A. McD. Singleton, secretary and treasurer.

Henrietta, Texas.—Hotel.—J. T. Wyant will, it is stated, enlarge his hotel.

Hope, Ark.—Hotel.—The Hope Hotel Co., lately mentioned, will erect a hotel this coming summer.*

Houston, Texas.—Sweeney & Coombs are reported to have let contract for their brick store to Contractor Heidman for \$12,000.

Houston, Texas.—The Bayou City Building & Loan Association has been organized with a capital stock of \$200,000 by W. N. Shaw, W. G. Van Fleet, W. A. Wheeler and others.

Houston, Texas.—Contract is said to have been closed for the erection of the opera-house lately referred to as to be built by Sweeney & Coombs.

Ivanhoe Furnace, Va.—Hotel.—The Ivanhoe Land & Improvement Co. will commence the erection of a hotel in a few weeks.

Jacksonville, Fla.—A. D. Basnett intends erecting a \$40,000 building.

Jonesboro, Tenn.—It is stated that a new courthouse will be erected.

Kimball (P. O. Wallview), Tenn.—Hotel.—Work is said to have been commenced on a 52-room hotel.

Knoxville, Tenn.—Hotel.—Contract will soon be let by the Gay Street Improvement Co. for the erection of the hotel mentioned last week.*

Lake City, S. C.—A branch of the Southwestern Building & Loan Association of New Orleans, La., has been organized with B. W. Jones, president, and W. W. McCutchen, secretary and treasurer.

Laredo, Texas.—A. Thaison confirms the report of several weeks since that he has contract for erecting the Masonic Temple.

Liberty, Texas.—The town has issued bonds for the erection of a hotel to cost \$5,000.

Louisville, Ky.—It is said that work will soon be commenced on the depot to be erected by the Ohio & Mississippi Railway Co. (office, Cincinnati, O.), the Louisville, New Albany & Chicago Railway Co. (office, Chicago, Ill.) and the Newport News & Mississippi Valley Co. (office, New York city), in place of the one lately destroyed.

Lynchburg, Va.—It is said that the West End Fox Club will erect a club-house at West Lynchburg.

Lynchburg, Va.—A branch of the Old Dominion Building & Loan Association of Richmond has been organized with N. C. Manson, president, and B. E. Hughes, secretary.

Marion, N. C.—Site is said to have been donated for the erection of a military academy.

Marion, N. C.—Hotels.—It is reported that two hotels will be erected shortly.

Maysville, Ky.—The Southern Methodist congregation will, it is stated, erect a new church at a cost of \$15,000.

Meridian, Miss.—J. P. Ratzburg has contract for erecting an addition to the East Mississippi Female College.

New Decatur, Ala.—G. W. Laine has prepared plans for a club-house and Knights of Pythias hall to cost \$7,000.

New Orleans, La.—James H. Windrim, supervising architect, U. S. Treasury Department, Washington, D. C., will receive proposals until April 25 for the erection of an observatory on the custom-house.

Owensboro—G. M. Thomson will receive proposals until April 15 for the erection of a church.

Oxford, N. C.—The Oxford Female College Co. has been organized for the purpose of maintaining a college and erecting buildings.

Pulaski, Tenn.—The Giles County Farmers' Association is erecting a warehouse.

Pulaski City, Va.—Hotel.—The Pulaski Development Co. expects to secure the erection of a hotel on its property.

Richland, Ga.—The Americus Investment Co., of Americus, is said to contemplate the erection of a warehouse.

Roanoke, Va.—The Valley Building & Investment Co. has been organized with Leigh Buckner, president, and D. H. Scott, secretary and treasurer.

Roanoke, Va.—The Roanoke Building Co. has been organized with P. L. Terry, president, and J. F. Barbour, general manager. The company has secured, it is said, the contract for erecting a \$20,000 dwelling for E. H. Stewart.

Roanoke, Va.—L. L. Powell is reported as contemplating the erection of a residence to cost \$10,000.

Rockwood, Tenn.—Hotel.—The Rockwood Hotel Co. has been organized by T. J. Brown, J. F. Tarwater, Robert Pritchard, M. M. Duncan and D. M. Coffman. The company contemplates erecting a hotel shortly.

Salisbury, N. C.—Hotel.—A stock company is reported as organized for the purpose of erecting a \$50,000 hotel.

San Antonio, Texas.—The Alamo Fire Insurance Co., referred to lately, states that it will erect a four or five-story building to cost about \$40,000.*

Searcy, Ark.—The Searcy Male College has been organized with a capital stock of \$50,000. It is said that a large building will be erected at once.

Starke, Fla.—Morgan Bros. and J. G. Alvarez each contemplate the erection of brick buildings.

Stephensville, Texas.—The Stephensville Building & Loan Association has been incorporated with a capital stock of \$100,000 by M. S. Crow, L. M. Frank, J. H. Cage and others.

Suffolk, Va.—Site has been secured for the new church to be erected by St. Paul's P. E. congregation.

Tallapoosa, Ga.—The erection of an opera-house to cost \$10,000 is being talked of.

Tampa, Fla.—James Bellivant is said to have secured contract for the erection of Mr. Solomonson's building, to cost about \$13,000.

Upper Falls, Md.—The Upper Falls Building Association has been incorporated by Joshua Hammond, E. W. Altavater, Edward Reynolds and others.

Washington, D. C.—A permit has been issued to Woodward & Lothrop for the erection of a brick store to cost \$75,000.

Washington, D. C.—Jake Frank will erect a club-house to cost \$25,000.*

Washington, D. C.—Henry Strong will erect a dwelling to cost \$70,000, also warehouse and store to cost \$60,000; D. B. Groff, 9 dwellings to cost \$23,000; B. F. Fuller, a dwelling to cost \$9,000; G. Lewis, a dwelling to cost \$7,000; John D. Herrell, 4 dwellings to cost \$20,000; J. W. Offutt & Bro., 2 brick dwellings to cost \$7,000; plans have been prepared by A. P. Clark, Jr., for a Baptist chapel.

Weatherford, Texas.—Salan, Vaughn & Fagan are said to have secured contract for stone work, and Flynn & Hutchinson for wood work, on the new Cumberland Presbyterian College, previously referred to.

Southern Financial News.

NEW BANKS.

Athens, Tenn.—The Athens Abstract Co. has been chartered.

Birmingham, Ala.—The National Guaranty Loan & Trust Co. has been organized with a capital stock of \$2,000,000. Charles M. Shelly is president.

Bridgeport, Ala.—Preparatory steps are being taken to organize a national bank with \$100,000 capital.

Cardiff (P. O. Rockwood), Tenn.—The First National Bank of Cardiff has been authorized to commence business. Hon. J. F. Tarwater and others are the organizers.

Edgefield, S. C.—The Farmers' Loan & Savings Bank, previously referred to, has been chartered with W. H. Zimmerman, president.

Frankfort, Ky.—Bills have been introduced into the legislature to incorporate the Bank of Hazel Green, Ky.; to incorporate the Stanton Deposit Bank of Stanton; to incorporate the Cloverport Bank & Trust Co. of Cloverport; to incorporate the St. Helens Security Bank of St. Helens; to incorporate the People's Savings Bank & Trust Co. of Newport; to incorporate the Home Deposit & Trust Co. of Louisville, with Cary Peter, C. L. Warren and others as incorporators.

Galveston, Texas.—The Galveston National Bank has been authorized by the comptroller of the currency to commence business.

Granbury, Texas.—The Hood County National Bank has been authorized to commence business. Otto S. Huston, of Fort Worth, and others are interested.

Greensboro, N. C.—The South Greensboro Investment Co. has been incorporated by James D. Glenn, John S. Hunter, W. R. Burgess and others; capital stock, \$100,000.

Lake Charles, La.—The First National Bank has been authorized to commence business.

Laurel, Md.—The Citizens' National Bank, previously mentioned, has been organized with C. H. Stanley, president, and A. T. Brook, cashier.

Marion, S. C.—Mr. Blanton will, it is reported, organize a bank.

Memphis, Tenn.—The First National Bank, previously referred to, has increased its capital stock from \$150,000 to \$200,000.

Nottingham, Ala.—The Bank of Nottingham has been organized with J. M. N. B. Nix, of Chattanooga, Tenn., president, and Gary Pitman, of Albany, Ga., cashier.

Parkersburg, W. Va.—The First National Bank and the State Savings Bank have consolidated under the name of the former. F. M. Deurlin, of Grafton, is cashier.

Shelby, Ala.—The Shelby City Bank, recently rumored, has filed articles of incorporation with T. G. Bush, J. W. Lapsley, J. B. Godwin and the Alabama Coal & Iron Co. as incorporators; capital stock, \$100,000.

Tyler, Texas.—The East Texas Loan & Savings Association has filed its charter with the secretary of State; capital stock, \$250,000.

Washington, D. C.—A bill has been introduced into Congress providing for a new system of banking. It provides for the establishment of a department of banking, which shall establish branch banks at postoffices throughout the country, to be maintained as long as necessary.

Aiken, S. C.—The Aiken County Loan & Savings Bank has declared a dividend of 3 per cent.

Austin, Texas, will hold an election on May 5 to determine the issuance of \$1,400,000 of bonds, proceeds to be used in providing for the construction of a dam across the Colorado river.

Birmingham, Ala., has sold \$200,000 of city bonds to Blake Bros. & Co., of Boston, Mass., for 104-55.

Charles County, Md., has been authorized to issue bonds to pay off indebtedness.

John R. Dillon, clerk to Chatham county commissioners, Savannah, Ga., will receive proposals until May 6 for the purchase of \$70,000 of county bonds.

Liberty, Texas, has issued bonds for the erection of a \$5,000 schoolhouse.

Louisville, Ga., has decided to issue \$2,500 of bonds, previously mentioned.

Oakland, Md., has been authorized to issue bonds.

The Cairo & Kanawha Valley Railroad Co. (office, Cairo, W. Va.) has authorized the issuance of \$75,000 of first mortgage bonds.

The Chattanooga Land, Coal, Iron & Railway Co., of Chattanooga, Tenn., has, it is reported, sold its whole issue of bonds, amounting to \$1,000,000, to a syndicate of English bankers.

The East Lake Land Co. will hold a meeting on April 30 to consider a proposition to issue \$100,000 of bonds.

The Home Protection Fire Insurance Co., Huntsville, Ala., has declared a dividend of 8 per cent.

The Kentucky Union Land Co. will hold a stockholders' meeting at Louisville, Ky., on April 22 for the purpose of issuing preferred stock, a part of which will be used for paying off \$80,000 of outstanding bonds.

The Louisville Banking Co., Louisville, Ky., has declared a quarterly dividend of 4 per cent.

The Maryland Ice Co., of Baltimore, Md., has given two mortgages to the Central Trust Co. of New York City, one for \$250,000 and the other for \$110,000. The rate of interest is 6 per cent., and the mortgage bonds are redeemable in 1910.

The Morehead Banking Co., Durham, N. C., has declared a dividend of 8 per cent., payable May 1.

The National Building & Loan Association of Louisville, Ky., has declared a semi-annual dividend of 6 per cent.

The New Orleans City & Lake Railroad Co., of New Orleans, La., has declared a quarterly dividend of \$1.50 per share.

Wheeling, W. Va., will hold an election on April 15 for the purpose of ascertaining as to the issuance of bonds for bridge purposes aggregating not more than \$100,000.

Toccoa, Ga., April 5, 1890.—We intend erecting a steam furniture factory here, and want prices on 40 horse-power engine and all machinery for factory, including dry-kiln.

SIMMONS & SIMPSON.

CHATTANOOGA, TENN., April 2, 1890.—We have incorporated the Davis & Shime Brick & Terra Cotta Co., and we expect to make ordinary pressed and fancy trimming brick. We will run three machines, capacity 80,000 to 100,000 daily, we will also add terra cotta as one of our outputs soon as we get started.

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Richmond Stock Exchange Quotations.

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	BID ASKED.
North Carolina 4's, 1910	96 97%
North Carolina 6's, 1919	122 126
Virginia New 3's, 1932	66 67
Lynchburg, Va., 5's, 1915	104 ..
Petersburg, Va., 5's, 1918	103 1/2 ..
Norfolk, Va., 5's, 1911	104 ..
Richmond, Va., 5's, 1922	110 114
Atlanta & Charlotte Ry. 1st 7's, 1907-12	121 121 1/2
Atlanta & Charlotte G'd 6's, 1900	103 104
Char., Col. & Aug. R.R. Gen. 6's, 1932	109 1/2
Georgia Pacific Ry. 1st 6's, 1922	112 1/2 113 1/2
Georgia Pacific 2d 5's, 1923	79 1/2 81
Ga. Pacific Incomes, 5's ..	32
Petersburg Railroad Class A 5's, 1926-105	105 ..
Petersburg Railroad Class B 6's, 1926-104 1/2	104 1/2 ..
Rich. & Danville R. R. Gold 6's, 1915-116	116 ..
West. N. Car. R. R. Gen. 6's, 1914	92 ..
Northwestern N. Car. R. R. 1st 6's ..	100 ..
Atlanta & Charlotte R. R. Stock ..	91 92%
North Carolina Railroad Stock ..	100 ..
R. F. & Pot. R. R. Div'd Obligations ..	108 1/2 109 1/2
Virginia Midland Railway Stock
Sloss Iron & Steel Co. 1st 6's
Sloss Iron & Steel Co. 2d 6's

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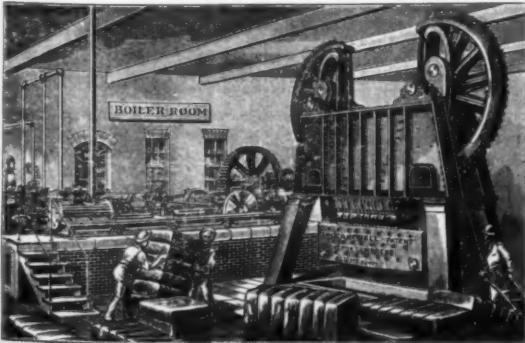
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Is sold on the following **GUARANTEE:**



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First-Class Compress.

Correspondence Solicited.
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THE
North Carolina Steel & Iron Co.
 GREENSBORO, N. C.

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Vice-President,	JULIAN S. CARR.
General Manager,	J. J. NEWMAN.
Secretary and Treasurer,	SAM'L H. WILEY.
Attorney,	THEO. F. KLUTTZ.

Executive Committee.

J. A. ODELL.	A. B. ANDREWS,	J. A. GRAY.
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DIRECTORS.

GEORGE S. SCOTT, New York.	THEO. F. KLUTTZ, Attorney at Law and President Yadkin R. R. Company, Salisbury, N. C.
A. B. ANDREWS, Second Vice-President R. & D. R. R. Company, Raleigh, N. C.	JULIAN S. CARR, President Odell Hardware Co., Greensboro, N. C.
JAMES A. ODELL, President Odell Hardware Co., Greensboro, N. C.	JULIUS A. GRAY, President Cape Fear & Yadkin Valley R. R. Company, Greensboro, N. C.
	J. J. NEWMAN, M. E., President Dutch Creek Mining Company, Salisbury, N. C.

This company owns the famous "Ore Hill" property in Chatham County, N. C., that has been noted as an iron property for more than a century. Ores from it were used in the manufacture of iron during the revolutionary war. During the late civil war the Confederate government selected this locality as the site of large iron and ordnance works, because of the exceptionally high grade of its ores.

The lack of railroad facilities has made impossible, hitherto, the profitable utilization of these ores on any large scale. The locality is now, however, made accessible by the Cape Fear and Yadkin Valley Railroad, which passes through the property.

Some of the most noted iron men in America have examined and reported on these ores, and so far as the directors of this company know, there has never been an expert report on it that was not highly favorable.

Prof. Charles D. Wilber, inspector of mines and mineral lands, formerly State Geologist of Illinois, and geologist and mining expert for the Northern Pacific Railroad, visited Ore Hill in 1884.

Extracts from his report and the opinions of Dr. E. Emmons, formerly State geologist of North Carolina, Prof. W. C. Kerr, State geologist, Prof. F. A. Gentz, of Philadelphia, S. A. Richards, formerly Superintendent of Furnaces for the Joliet Steel Company, Mr. Thomas Graham, a prominent iron manufacturer of Philadelphia, and others, are published in the company's prospectus.

The Manufacturers' Record, of Baltimore, having learned of the proposed organization of this company, investigated, on its own account, the Ore Hill tract. The report of its expert, Mr. Thomas P. Williams, M. E., is also given in the prospectus.

The company recently employed Mr. Frederick H. Smith, of Baltimore, a noted mining engineer and mineralogist to examine the property. His report confirmed all that had been claimed, and he advised the company to build the furnaces. Mr. Smith is a man of such eminence in his profession that it would be superfluous to make any mention of the value of his report. He is a member of the American Society of Civil Engineers, a member of the American Institute of Mining Engineers, and an Associate of the American Institute of Electrical Engineers.

Coke for the furnaces will be brought from Pocahontas, 245 miles, by the Norfolk & Western and Cape Fear & Yadkin Valley Railroads, which will connect at the State line near Mt. Airy, N. C.

In the organization of the company its projectors had in view:

1st. The building of furnaces for the manufacture of iron and steel, and ultimately the building of rolling mills and other industries for the utilization of the product of the furnaces.

2nd. The acquisition of a considerable area of land around the locality that might be selected as the site of the furnaces, in order that the company might itself enjoy the results of its own work, by getting the benefit of the increase in real estate values that would follow the establishment of furnaces and other industries.

3d. The inauguration of a general development and town building enterprise, starting with an attempt to secure the location on its property of iron, wood, textile and other industries, thus bringing together an aggregation of factories and stores, and a continually increasing population, with the resulting need for land for business and residence purposes.

TOWN SITE PROPERTY.

Before announcing its purpose the Company, through its agents, secured options on about 2,500 acres of very desirable property adjacent to Greensboro, some of it being within the corporate limits, and the whole of it being in an almost solid body. About 1,500 acres have already been purchased, and the remainder is being taken up as the options expire. The whole of it has been secured at an average price of \$15.00 an acre. This is no more than has been paid for the town site lands on which most of the industrial towns of the South have been built up, and in comparison with this has the immeasurable advantages of extensive railroad connections and facilities unexcelled by any of them, an attractive, progressive town of 7,000 people to start with. Water works, gas works, electric light works, paved streets, churches and schools, elegant houses, an established society, and all the attractions that pertain to an old community.

LAND SALES.

Judging from the experience of other development enterprises, it would seem to be within a reasonable and conservative limit to expect within two years to realize from sales of lots, covering a comparatively small part of the total area of land purchased, an aggregate sum equal to the capital stock of the company. This, when added to the expected profit from this company's furnaces and other works, makes the opening for the investment of capital one of the most inviting that has been presented to the public since the beginning of the present industrial era in the South.

The company will build at once two furnaces, one to make Bessemer iron and the other mill and foundry iron.

THE CAPITAL STOCK OF THE COMPANY IS \$1,000,000.

Subscriptions have already been received for about \$300,000 at par. None of the stock will be sold at less than par. The proceeds will go into the treasury to be used for development purposes with a view to making valuable the company's lands.

It is probable that when one-half the stock (\$500,000) has been subscribed for, the books will be closed until after the first land sale.

For particulars as to time of payment, &c., address the company at Greensboro, N. C.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston—Brick-yard.—The J. T. White Brick Co. is reported as putting in new machinery.

Anniston—Planing Mill.—E. M. Lewis is reported as erecting a planing mill.

Anniston—Land.—The Clarion Land & Improvement Co. has been, it is reported, organized at Clarion, Pa., with Charles Leeper, president; H. V. Cull, business manager, and A. G. Corbett, treasurer, to purchase and develop property in Anniston. The capital stock is \$100,000.

Bessemer—Iron Furnace.—The De Bardeleben Coal & Iron Co. has blown in one of its new furnaces previously mentioned.

Bessemer—Broom Factory.—J. H. Hard has started a broom factory.

Bessemer—Brick Works.—P. B. Clarke is president, and J. W. Johnson, secretary, of the Peerless Pressed Brick & Construction Co., recently mentioned. The capital stock is \$20,000.

Birmingham—Electric Plants.—The organization of the Birmingham Electric Co. by the consolidation of the Ensley Railway Co., Birmingham Union Railway Co. and the Birmingham & Bessemer Railroad Co. is contemplated, and it is proposed to erect several electric power plants to operate the roads.

Birmingham.—The East Lake Land Co. will meet April 30 to consider the issuance of \$100,000 bonds.

Camden—Gin and Shingle Mill.—Henderson, Liddell & Co. erected the cotton gin and shingle mill lately mentioned.

Chickasaw—New Town.—The Riverton Land Co. is reported as to be organized to build a new town.

Eufaula—Furniture Factory, &c.—J. D. Ransom and W. H. Godwin have, it is reported, purchased the Barbour Machine Works, and will operate same as a furniture factory and variety works.

Fairfield—Planing Mill.—The Seaboard Manufacturing Co. will, it is stated, put additional machinery in its planing mill.

Florence—Ice Factory.—The Sweetwater Ice & Coal Co. has, it is reported, increased capital stock to \$30,000, and will put new machinery in its ice factory.

Florence—Rope Factory.—F. F. Cooper contemplates establishing a rope factory.*

Fort Payne—Oil Well.—A company is being formed to sink an oil well.

Guntersville—Coke Ovens, etc.—J. A. Jacobs, of New York, representing a syndicate of New York and foreign parties, has, it is reported, purchased 31,120 acres of mineral land in Marshall and De Kalb counties, and will develop. The syndicate has also, it is stated, purchased coal lands at Elrod's mill, will open iron mines and build coke ovens.

Middle—Coal Mines and Coke Ovens.—The Standard Coal Co., lately mentioned (under Tuscaloosa), is opening new mines at the new town of Boundbrook, and building two coke ovens.

Mobile—Saw and Shingle Mill.—P. R. Tunstall is reported as to erect a saw mill on the Alabama river above Mobile.

Mobile—Dry-dock.—The dry-dock previously mentioned as to be built by the Gulf Dry-dock Co. will be 340 feet in length, 92 feet in width at top and 48 feet at bottom. The estimated cost is \$133,550.

Opelika—Wagon Factory.—Hudman Bros. & Co. will erect a wagon factory in connection with their iron works.*

Opelika—Furniture Factory.—A project is on foot to erect a furniture factory. B. A. Cooper can give information.

Shelby—Boiler and Machine Works.—An Ohio company has, it is reported, submitted a proposition, which has been accepted, to establish boiler and machine works. The Alabama Coal & Iron Co. can probably give information.

Somerville—Saw Mill.—J. L. Draper will erect a saw mill.*

ARKANSAS.

Arkansas City—Furniture Factory.—Charles Ferguson will, it is reported, reorganize the Budenburg Furniture Co., to double the capacity of the factory and increase capital stock to \$25,000.

Brinkley—Stave Factory.—White & McGary will, it is reported, start a stave factory.

Camden—Planing Mill.—It is reported that Boston (Mass.) parties have purchased a site, through Freidheim & Sevier, on which to erect a planing mill.

Camden—Electric-light Plant.—The Camden Electric Light Co. contemplates putting in an incandescent plant.

Dardanelle—Oil Mill.—The cotton-seed oil mill lately mentioned will be erected, but not in time for this season's crops. Machinery is to be purchased about January 1st, 1891. Joseph Evans can give information.

Little Rock—Handle Factory.—The Little Rock Handle & Hardwood Lumber Co. has been organized with W. C. Scott, president; C. M. Taylor, secretary, and Augustus Kendrick, general manager, to erect a handle factory. Contract for the building has been let to W. D. Holtzman. The capital stock is to be \$100,000.

Little Rock—Barrel and Stave Factory.—Inducements have been offered to the Western Manufacturing Co., of Lincoln, Neb., to locate a barrel and stave factory in Little Rock.

Texarkana—Saw Mill.—The Big Woods Lumber Co., mentioned in last issue as chartered, has let contract for machinery for a saw mill to be erected on the Texarkana & Shreveport Railroad.

Warren—Iron Foundry.—Pine Bluff parties contemplate establishing an iron foundry in Warren.

FLORIDA.

Chipley—Fertilizer Factory, etc.—A fertilizer factory and a cabinet shop are reported as established.

Gainesville—Pottery.—The Gainesville Pottery Co. is reported as organized with H. F. Dutton, president, and Marcus Endel, secretary, and started a pottery.

Jacksonville—Cigar Factory.—Oppenheimer & Hirsch, of Key West, have leased a building for their cigar factory mentioned in last issue.

Lafayette County—Land.—Mr. Fishburn, of Charleston, S. C., is reported as purchasing 4,000 acres of land in Lafayette county from P. A. McIntosh, of Luraville, for \$150,000.

Ocala—Cigar Factory.—Felipe Vasquez, of Ocala City, is reported as about to erect a cigar factory at Ocala.

Plant City—Phosphate Lands.—The Florida Guano, Phosphate & Fertilizer Co. has been organized with J. B. Collins, president; J. A. Crichlow, vice-president; J. G. Collins, treasurer; N. M. Bowen, secretary, to develop phosphate lands near Plant City.

Tallahassee—Canning Factory, etc.—Willis M. Bell, Drawer N, can give information on the canning factory lately mentioned, also on projected creamery and soap factory.*

Tallahassee—Machine Shops.—The Eureka Machine Shops, lately mentioned, will put in additional machinery.

Tampa—Cigar Factory.—It is stated that Storm & Stratton, of New York city, will locate a cigar factory in Tampa.

Wakulla County—Phosphate Land.—Charleston (S. C.) parties are reported as purchasing phosphate lands from Abram Bradham, of Sopchappy, for \$20,000.

GEORGIA.

Albany—Machine Shops, etc.—Cruger & Pace will, it is reported, change the location of their planing mill and variety works and add machine shops.

Albany—Water Works.—The Albany Improvement Co. has been organized with the privilege of constructing water works, dealing in real estate, etc. The capital stock is \$100,000.

Americus—Barrel Factory.—The Standard Oil Co. will, it is reported, locate a barrel factory in Americus in connection with its new warehouse.

Americus—Iron Works.—S. H. Hawkins, John Windsor, E. F. Lanier and others have incorporated the "Americus Iron Works" to remove the iron works of the Lanier Bros. from West Point

to Americus, lately mentioned. The capital stock is \$50,000.

Atlanta—The Toilers' Home Investment Co. has been incorporated by C. A. Breen, W. H. R. Schroeder, Ed. Klapper and others. The capital stock is to be \$100,000.

Atlanta—Vinegar and Pickle Factory.—The Piedmont Vinegar & Pickle Works has been established by W. D. Stratton, of St. Louis, Mo., and T. F. Hall, of Virginia.

Augusta—Glass Factory.—The Augusta Glass Co., lately mentioned, has purchased site for its glass factory.

Barnesville—Knitting Factory.—A \$12,000 stock company will, it is reported, be organized by J. A. Blalock, J. P. Thurman and others, to build the knitting factory recently mentioned.

Carrollton—Electric-light Plant.—An electric-light plant will probably be put in the new hotel to be built. E. G. Kramer can give information.

Carrollton—Brick-yard.—W. J. Stewart has purchased the plant of the Carrollton Brick Co., and will, it is stated, put in new machinery.

Cohutta—Marble Quarries.—A company is reported as being organized to develop marble quarries.

Columbus—Land.—J. B. Holst, D. P. Dozier, Soule Redd and others have, it is reported, purchased the Cook property of 255 acres.

Columbus.—The Columbus Land & Improvement Co. has amended charter, changing name to the Rose Hill Co. and making the authorized capital stock \$500,000.

Columbus.—The Queen City Land Co. has been chartered with a capital stock of \$5,000.

Cordele—Shoe Factory.—J. W. Brumby, J. E. D. Shipp, D. J. McRae and others have incorporated the Cordele Shoe Factory, mentioned in last issue as in course of erection. The capital stock is \$20,000.

Dawson—Fertilizer Factory.—A company is reported as forming to erect another fertilizer factory.

Dawson—Cotton Compress.—A \$30,000 stock company has been organized by the Hamilton Cotton Co., of Americus, and others to erect the cotton compress previously reported.

Dickey—Machine Shop.—E. P. Parkins has started the machine shop lately mentioned (under Whitney.)

Douglasville—Electric Plant, etc.—T. R. Whitley, lately mentioned as to develop a water-power, is constructing dam and will use power to operate an excelsior factory in the day and electric plant at night.*

Elijay—Saw Mills.—The Evans Land & Lumber Co., lately reported as chartered, will build two saw mills in Northwest Georgia.

Forsyth—Soap Factory.—The establishment of a soap factory is probable. W. E. Saunders can give information when anything definite is done.

Forsyth—Ice Factory.—W. E. Sanders will start a small ice factory.*

Graysville—Distillery, &c.—The Graysville Mining & Manufacturing Co. is repairing its grist mill and distillery, lately damaged by a wind storm.

Griffin—Oil Mill.—The Griffin Oil Mill & Fertilizer Co. is reported as putting in additional machinery.

Griffin—Stone Quarries.—The Central Railroad & Banking Co. (office, Savannah) has, it is reported, awarded contract to Ross & Tench, of New York, to develop its stone quarries near Griffin.

Hawkinsville—Brick-yard.—R. V. Bowen is reported as to start a brick-yard.

Hickory Level—Fertilizer Factory.—A fertilizer factory will probably be erected.

Macon—Bridge.—The county commissioners have decided to rebuild the Hartley bridge.

Milledgeville—Machine Shops.—G. R. Lombard & Co., of Augusta, are reported as to start branch machine shops in Milledgeville.

Montezuma—Ice Factory.—A \$10,000 stock company has been organized to start the ice factory lately mentioned. The Montezuma Investment Co. can give information.

Montezuma—Medicine Factory.—Dr. P. R. Holt, J. E. De Vaughn, E. B. Lewis and others will incorporate the Holt's Dyspeptic Elixir Co., to manufacture medicines, perfumes, &c.

Montezuma—Soap Factory.—Harrison, Netheron & Felton have organized a stock company to erect the soap factory lately mentioned.

Montezuma—Saw and Shingle Mill.—Maxwell & Raje have purchased timber lands and contemplate erecting a saw and shingle mill.

Peyton—Grist Mill and Gin.—A. J. Wilson contemplates erecting a cotton gin and grist mill.*

Preston—Hub and Spoke Factory.—The Pres-

ton Hub & Spoke Factory has been organized with J. B. Hudson, president, and S. R. Stevens, secretary, to establish the spoke and hub factory lately mentioned. The authorized capital stock is \$50,000.

Quitman—Saw Mill.—G. D. Purvis will rebuild his saw mill mentioned in this issue as burned.

Richland—Cotton Factory.—Anthony Clegg, of Columbus, and C. N. Alston contemplate organizing a stock company to erect a cotton factory.

Richland—Fertilizer Factory.—E. J. Pothro, D. E. Ponder, Mr. Sheppard and others have, it is reported, organized a \$35,000 stock company to erect the fertilizer factory lately mentioned.

Rockmart—Iron Mines.—Gordon McKay, of Newport, R. I.; C. A. Henderson, of Brookline, Mass.; T. B. Warner, of Cincinnati, O., and others have incorporated the Cochran Ore Co. to develop the Cochran iron mines, mentioned last week. The capital stock is \$36,000.

Savannah—Adamant Works.—W. W. Gordon, H. M. Comer, J. R. Anderson and others have, it is stated, organized a \$20,000 stock company to start the adamant works recently mentioned.

Savannah.—The City Suburban Improvement Co. has been organized with C. H. Way, president, and C. H. Olmstead, secretary and treasurer.

Savannah—Sewer.—W. J. Winn, city engineer, will receive bids until April 15 for the construction of the Bilbo canal sewer.

Savannah—Mineral Water Factory, etc.—The Continental Chemical Co. will add the manufacture of mineral soda water and chewing gum to its plant.*

Smithville—Cotton Factory.—The establishment of a cotton bagging and cotton factory is in prospect.

Smithville—Furniture Factory.—Thompson Bros. & Jordan have established the furniture factory mentioned in last issue.

Sparta—Planing Mill.—The Sparta Brick Co., it is reported, erected planing machinery.

Tallapoosa—Water Works.—Wolftman, Keith & Co., of New York, mentioned in last issue as securing water works franchise, will build works to cost \$50,000. Three miles of 10-inch mains are to be laid.

Thomasville—Cotton Factory.—The organization of a company with a capital stock of \$100,000 to erect a cotton factory is proposed.

Thomasville—Oil Mill and Fertilizer Factory.—A \$50,000 stock company will probably be formed to erect a cotton seed oil mill and fertilizer factory. J. L. Hall can give information.

Toccoa—Shoe Factory and Tannery.—The Toccoa Tanning Co. has established the tannery reported in last issue, and intends adding the shoe factory mentioned.

Toccoa—Furniture Factory.—Simmons & Simpson contemplate erecting the furniture factory mentioned in last issue.*

KENTUCKY.

Ashland—Water Works.—A bill has passed the legislature incorporating the Ashland Water Supply Co.

Ashland—Land, etc.—J. F. Hager, Governor Buckner, A. C. Campbell and others have organized the Land & Investment Co. of Ashland, and, it is reported, purchased 2,000 acres of land for about \$500,000; also the water works franchise. The capital stock is \$3,000,000.

Avenstone—Turnpike.—The Avenstone & Wilson Creek Turnpike Road Co. has petitioned the legislature for a charter.

Bagdad—Printing, etc.—A bill has been introduced in the legislature incorporating the Bagdad Printing & Publishing Co.

Barbourville—Brick-yards, etc.—The Barbourville Land & Improvement Co. writes that two brick yards with capacity of 40,000 per day each, a steam laundry and a spoke and hub factory will be established; also that it intends letting contract for sinking an oil well.*

Beaver Lick—Turnpike.—An act to incorporate the Beaver Lick & South Fork Turnpike Co. has passed the legislature at Frankfort.

Buckeye—Turnpike.—A bill has been introduced in the legislature incorporating the Buckeye & Poor Ridge Turnpike Co.

Burlington.—Turnpikes.—Bills have been introduced in the legislature at Frankfort incorporating the Burlington & Normansville Turnpike Road Co. and the Burlington & Union Turnpike Co.

Campbellsville—Turnpike.—A bill has been introduced in the legislature incorporating the Campbellsville, Elkhorn & Mansville Turnpike Road Co.

Danville—Planing Mill.—J. S. Roberts has purchased the Danville planing mill for \$9,200, and will operate.

Flemingsburg—Sash, Door and Blind Factory.—

SUPPLEMENT

CARDIFF, THE PIVOTAL POINT

of the East Tennessee Coal and Iron Region,
Where W. P. Rice and a Powerful Syndicate are Going to Build a Model Manufacturing City.

Iron now being Produced so Cheaply as to be Profitably Shipped to the Canadian Dominions of Queen Victoria.

The Tennessee River as a Factor in Cheap Transportation.

(Written for the MANUFACTURERS' RECORD.)

Much will be expected at Cardiff, but no one will be disappointed. Thousands will come, but all will be taken care of, so far as "creature comforts" are concerned, at the great sale of town lots, which will begin on April 22. The reason why no one will be disappointed is because all that the promoters of the place have said of its merits is true—absolutely true. The fact is the half has not been told. It is a wonderful situation. Its resources are beyond computation. It is being managed by master managers. It will be built by master builders.

* * *

When I left W. P. Rice, one of the clear-headed living town builders, at Boston last week, he asked me to come to Cardiff and write from investigation a report for the MANUFACTURERS' RECORD, but not to hesitate to write down the bad, just as emphatically as I should write up the good. "For," said he, "we cannot afford to have the public come to Cardiff and be disappointed."

* * *

Accordingly I submit the following facts, on which the future of Cardiff is predicated:

1. An enormous quantity of easily-mined coking coal—coal whose availability is not experimental, but which has been tested for many years.

2. At least four hundred millions of tons of high-grade iron ore, which may be mined and dumped into Cardiff's furnaces at a cost not exceeding 80 cents a ton, besides millions of tons more at depths where the cost of mining will be but little more.

3. A beautifully situated town site on a great trunk line, and within easy reach of the Tennessee river.

4. Men to manage the development of these resources in whose capacity and honesty of purpose public confidence is unbounded.

5. A couple of millions in cash with which to begin developments.

* * *

It is only a matter of a few months when the importance of the foregoing five great facts will be realized by investors, big and little, and by manufacturers likewise on both sides of the ocean.

* * *

It is a theory to which Mr. W. P. Rice, the leading spirit in the Cardiff enterprise, is indissolubly wedded, that the surest way to secure the alliances essential to success in city building is to interest influential people by making them virtual partners—in other words, to give them a chance to share in the profits. Therefore it has been arranged to bring ten trains from New England and as many more, loaded with the right men, from various points North, West and South, to whom during the coming sale lots will be offered at prices so low as to

give every purchaser what I consider a certainty of profit.

* * *

It is the pay-roll that makes lots go up; and the pay-rolls at Cardiff will soon sustain a great population. Nor will the development be transitory. The ore veins and the coal fields owned by this company come as near to being inexhaustible as any in America. Cardiff has every resource to make it a second Birmingham.

FURNACE TESTS

Facts that Actual Use has Proven Concerning the Coal and Iron Close to Cardiff and Owned by the Cardiff Company.

That the coal and the iron ore which will form the foundation of Cardiff's growth have been tried and tested in furnaces and found not only fit for use, but with few if any rivals, so far as general results are concerned, is a fact of powerful significance—a fact of greater import than the casual reader at first blush may comprehend.

The trouble with a great many town-building schemes in this, the greatest town-building era in the history of the world, will come from jumping at the conclusion that all iron ore is workable, that all deposits of ore are inexhaustible, and that coal is coal, no matter what its quality nor the facility with which it may be worked. Such theorists are a curse to the country, and their followers will soon enough be wailing and gnashing their teeth; or their proposed towns will turn out to be like houses built upon the sands of the sea. I have said this to accentuate the importance of having furnace tests made of such ores and coals as may be held out to the public as forming the basis of organized industrial development.

Far from having made the blunder of building a town on a wish which is the father to the thought, the proprietors of Cardiff secured in advance a great coking coal field—some fifty thousand acres—the quality of which is attested by the results achieved at the Roane furnaces, where iron has been smelted for years from coke from the same identical field.

So too of iron ore. It was stated in a former letter that the Roane furnaces at Rockwood, just south of Cardiff, had been for twenty-three years enormous dividend payers. During my stay here I have been asking questions and putting together this and that, in order to find out what would be the exact cost of producing pig iron at Cardiff. I have talked a good deal with Mr. Duncan, the manager of these furnaces, and although all furnace managers have a way of exaggerating the cost of production, I have found out enough to feel fully warranted in asserting that at no point in the United States can iron be made more cheaply than at Cardiff. Whether this means \$7.50 or \$8.50 or more I do not say, but instead will tell something that means far more than any estimate I might figure out, viz.: a large percentage of the output of pig from the same veins of ore as those owned by the Cardiff Company and from the same coal, is sold at a profit in Canada!

In other words, the makers of this iron pay a duty of \$4.00 a ton and an average of over \$4.50 a ton freight, and still undersell British iron-masters in the Queen's dominions.

And the Cardiff furnaces will be able to make cheaper iron than is now being made at Rockwood.

Whether it was a knowledge of the fact that iron from this vicinity was being sold at a profit in Canada that took Mr. Rice and Dr. Ford to England just before the launching of this Cardiff scheme, or whether they came to the conclusion while abroad that iron could be produced at Cardiff, Tennessee, more cheaply than at Cardiff in Wales, I have no information; but I do know, on the highest authority, that pig

iron made in the old-fashioned furnaces now running in this vicinity is being sold at a profit in the Queen's dominions.

TRANSPORTATION.

The Value of the Tennessee River as a Highway from Cardiff.

Muscle Shoals Canal or no Muscle Shoals Canal, Cardiff has in the Tennessee river an everlasting guarantee of cheap freight rates. The Queen & Crescent System is a great trunk line and runs right through the town site, but Cardiff will never long be dependent wholly upon this or any other railroad; for during eight months of the twelve, for years past, 200-ton coal barges have been carrying iron ore from the great vein, a large section of which is owned by the Cardiff Company, down to Chattanooga. \$50,000 will build a steamer and barges to bring Chattanooga within less than a day's run of Cardiff.

The Tennessee river is only three and a half miles from Cardiff, and the company will at once build a standard gauge railroad to the landing. There is a creek along whose banks this road can be built at little expense.

The iron ores of the Cardiff Company lie on both sides of the Tennessee river, and this railroad will be utilized to haul ores from the other side of the river to the company's furnaces. Captain J. F. Tarwater, who has for years been mining ores on this property and shipping them to various furnaces, told me that a contract was ready to be signed to mine and deliver ores from across the river to the furnaces at Cardiff for 80 cents a ton. In fact, hundreds of tons a day are now being taken from the company's vein on this side the river and delivered at that figure by contract.

So far as the quality of this ore is concerned, what I have said under the head of "FURNACE TESTS" speaks louder than any analysis.

THE SALE.

Preparations for Taking Care of the Crowd and Other Cardiff Items.

Under the plan of sale, lots will go to buyers at a price which will, in my opinion,

insure a profit of a hundred per cent. before the week is out, the idea being to make all who come go home feeling glad that they went to Cardiff. Elaborate preparations are under way for making the crowd comfortable. Two hundred tents and two thousand cots will be in position at the Cardiff end, while the gifted and lovable Dr. J. M. Ford is preaching the doctrine of Southern development out in "the wild and woolly West."

Since the publication of my letter from Boston stating that I intended to come to Cardiff and investigate the situation I have, so to speak, been "avalanchered" with requests from acquaintances all over the South asking my honest opinion about the chances of making money. I beg the use of your columns to answer such inquiries, and my answer to all is this: "Come to Cardiff on April 22d and stay a week, and unless I am the most deluded of mortals you will make more money, dollar for dollar, than has ever been made anywhere in the South." This is saying a great deal in these days of "fortunes in a day," but I believe it.

Before closing, a word about the cooperation extended to the scheme by the Queen & Crescent people. They are at work building the largest and finest depot on their entire line. They are at work adding seven thousand feet of siding (considerably more than a mile) which will be in position by the day of sale. Moreover, they are going to make lower excursion rates on the day of sale than were ever known on a similar occasion.

Apropos of cheap rates to the sale at Cardiff, these are not confined to the Queen

& Crescent. All of its connecting lines, as well as those of the East Tennessee (which strikes the Queen & Crescent near Cardiff) will make rates calculated to tempt investors from almost everywhere.

THOS. P. GRASSTY,

COTTON-SEED AND OLIVE OILS.

[Written for MANUFACTURERS' RECORD.]

No. 3.

There is no higher authority in the world, on the subjects of which it treats, than the United States Dispensatory. It is the druggists' guide and the physicians' book of ready reference. Whatever it says on any subject would be accepted as authority by every court in the land. In the edition of 1888, page 1051, may be found the following, under the officinal title, *Oleum Gossypii Seminis*, or cotton-seed oil:

"A fixed oil expressed from the seed of *Gossypium herbaceum*, *linne* and other species of *gossypium*, and subsequently purified.

This new officinal fixed oil has no other medical properties than those of a bland neutral oil, and has been introduced especially on account of its use in the officinal liniments of ammonia, lime, camphor, and subacetate of lead.

It is stated that there are at present more than forty mills in this country employed exclusively in the manufacture of this oil from cotton seed, consuming 410,000 tons of seed. The oil cake is largely exported to England, where it is used as food for cattle, and the oil to France, Italy and other olive-growing countries of Europe, whence much of it returns to us mixed with olive oil. Thus, of the oil exported from New Orleans in 1880, 88 per cent. was on orders from the Mediterranean ports. The quantity of oil exported in 1884 was 4,036,151 gallons, valued at \$1,717,863; in 1885, 6,574,985 gallons, valued at \$2,608,212; in 1886, 5,871,325 gallons, valued at \$1,991,362. In England a great deal of oil is extracted from Egyptian cotton seed; the importation of seeds having amounted in 1883 to 250,000 tons.

This oil is obtained by expression from the seeds previously deprived of their shells. In this state they yield two gallons of oil to the bushel. As first obtained it is thick and turbid, but deposits a portion of its impurities on standing. Besides this crude oil, there are three varieties in commerce more or less purified, recognized as the clarified, the refined and the winter-bleached. The last mentioned is of a pale straw color, a mild peculiar odor and a bland sweetish taste, not unlike that of almond oil. The oil is used in the preparation of woolen cloth and Morocco leather, and for oiling machinery. It has been found to be an excellent substitute for almond and olive oil in most pharmaceutical preparations in which they are employed, but it does not answer well in the formation of lead plaster. Citrine ointment carefully prepared with it, too great heat being avoided, retains long a rich orange color and proper unctuous consistency. It is officially described as "a bright, pale yellow, oily liquid, odorless, having a bland nut-like taste and a neutral reaction. Sp. gr. 0.920 to 0.930. It is only slightly soluble in alcohol, but readily so in ether. When cooled to near 2° C. (35.6° F.), it begins to congeal. Concentrated sulphuric acid instantly renders it dark, reddish brown. U. S. It is dissolved in all proportions by chloroform. By sulphuric acid it is made deep red, almost brown, but it is not obviously affected by nitric or hydrochloric acid. (A. J. P., 1861, page 208)."

Such is the authoritative statement of the Dispensatory. Now for some corroborative testimony by physicians.

[CONTINUED ON PAGE IV.]

CHEAP RAILROAD RATES

TO THE GRAN SALE

Beginning Tuesday

CARDIFF,

In the Valley of the Tennessee River, where W. P. RIC

THE MODEL MANUFACTURING

Immense Adjacent Deposits of IRON ORE and an enormous

CARDIFF COAL

Whose Capital is Five Millions

Two Millions of which will be Available for Building

The Lots will be offered by the Company at a moderate schedule, the building to be effected by the Company on sale never

TEN VESTIBULED SPECIAL TRAINS will be run from New England

Accommodations on the City site for two thousand people. Cuisine under the management of W. D. of the the Cincinnati Southern Railroad, and within two hours of Knoxville

LOTS FROM EVERYWHERE

RAN SALE OF LOTS

Saturday, April 22d, at
Cardiff, Tenn.

er, who W. P. RICE and his associates will build

THE YOUNG CITY OF THE SOUTH.

an enormous COKING COAL FIELD Owned by the

WIL & IRON CO.

For Millions of Dollars,

for Building Industries and Improving the New City.

rule the buyers will have the full benefit of the enhancement in values
on sale never equalled at any new town.

In New England alone, besides specials from all over the South and West.

W. P. Rice, of the famous "De Kalb" at Fort Payne. Cardiff is seventy-five miles north of Chattanooga on
the road to Knoxville by the East Tennessee's Keathley branch.

[CONTINUED FROM PAGE 1.]

Doctors E. T. Deem and V. E. Sumpter, of Brinkley, Ark., in a letter dated March 9, 1888, said:

"So far as our personal experience goes, we have used it in our own families for culinary purposes, and have known many others to do the same, and so far from considering it injurious in any sense, we deem it more wholesome than hog's lard."

Six prominent doctors of Helena, Ark., on March 10, 1888, united in signing the following testimonial:

"In reply to your inquiry of this date, as to whether, in our opinion, the use of cotton-seed oil as an article of food is in any degree deleterious to health, would say that it is a purely vegetable oil and contains no ingredient in any wise dangerous to health. On the contrary, we esteem it most healthful, and cheerfully recommend it as the purest article for cooking purposes of which we have any knowledge."

The following card was signed by ten eminent physicians of Arkansas:

"The undersigned, practitioners of medicine for many years, and members of the faculty of the medical department of the Arkansas University, having had their attention drawn to a bill now pending before the House Committee on Agriculture, known as the Butterworth bill, desire to say:

To make damaging charges against cotton-seed oil as compared with hog lard is not only scientifically false, but is actually absurd. With twenty or more years' experience with cotton-seed oil in cooking, Southern housekeepers have proven that it is not only cheaper, but that it is preferable in many respects, agreeing with the most delicate stomachs whether used in baking or frying, and as a salad oil it ranks with olive and can scarcely be distinguished from it. Not one instance has ever been given of health being in any manner impaired by the use, however free, of cotton-seed oil in food. The writers hereof have freely used it in their own families with the most eminent satisfaction, and can truthfully say that they consider it equal in wholesomeness to olive or any other vegetable oil.

The thousands of hands employed in the cotton-seed oil mills are in the habit of making their dinners on the crude oil, by dipping their bread in it, and some of them actually drink it, and yet from this free use of it nothing has ever resulted but the best of health, with sleek and glossy cheeks, to the ebon citizen commonly employed in this industry. In whatever way examined, whether chemically or physiologically, absolutely no charge can be brought against cotton-seed oil for human consumption that could not equally well be sustained against olive oil, which in all ages has borne testimony of its high value as a nutriment and luxury among civilized nations."

In 1889 the hog-fat renderers endeavored to get a bill through the New Hampshire legislature that would destroy the compound lard industry. In the course of the investigations made by the committee having charge of the bill, much medical testimony, given under oath, was elicited, some of which was as follows:

Dr. G. P. Conn, of Concord, said: "I am a practicing physician and surgeon, resident in Concord; I took my degree at Dartmouth Medical College, in the year 1856; I have held the position of secretary of the New Hampshire Medical Society for the last twenty years, with the exception of two years that I occupied the president's and vice-president's chairs of that society. I am also one of the medical faculty of Dartmouth Medical College, and have held that position for some four years, or ever since the chair of hygiene was established. I became a member of the New Hampshire State Board of Health when it was established in 1881, and have been

president of that board from that time to the present time. I was chosen vice-president of the National Association of Railway Surgeons at its meeting held last winter in the city of St. Louis. I am a member of the American Medical Association, the Medico-Legal Society of New York. I am honorary member of the State Medical Society of Vermont. I am a member of the American Public Health Association. * * * Cotton-seed oil, within the past ten years, has almost entirely taken the place of olive oil in our markets. It is still sold as olive oil, but chemical and microscopical examination show it to be pure cotton-seed oil. The conditions, both chemical and microscopical, are so nearly alike, that there is really no difference in its nutritive value. It is a well-known fact that immense quantities of cotton-seed oil are sent to Italy, only to come back as olive oil. In the South and West cotton-seed oil is taking the place of all forms of lard. These are well-established facts which no one who has investigated the problem will dispute. Cotton-seed oil and beef stearine would answer all the purposes of lard, and would be entirely unobjectionable from a sanitary standpoint."

Dr. J. A. Watson, of Concord, said: "I am a practicing physician, and as such, am a graduate of the medical department of the University of Vermont, of the class of 1871. From that time until 1881 I practiced my profession at Groveton, N. H. In 1881 I was appointed member of the New Hampshire State Board of Health and have continued a member of said board to the present time. During all of said period I have served, and am now serving, as secretary of the State Board of Health with my office located in the State capitol. * * * The sample of 'refined cotton-seed oil' I also tried as a salad oil and found it to be as palatable and satisfactory in every respect as the usual table oils. I also caused some doughnuts to be fried in the 'refined oil,' and found that it answered every purpose required of the best of lard in that respect. There were two plates of doughnuts upon the table, the one lot fried in the 'lard compound' and the other in this 'refined cotton-seed oil,' and I was unable to distinguish which was cooked in lard and which was cooked in cotton-seed oil. * * * I am decidedly of the opinion that the cotton-seed oil and beef stearine are either of them infinitely more healthful than any 'refined lard,' and that the 'lard compound,' as prepared, is more healthful than the lard before refining. In all my professional experience I have never known and have never read of an instance where a person's health has been impaired by the use of cotton-seed oil. I believe that cotton-seed oil is a thoroughly healthful product, as much so as olive oil."

Dr. J. J. Berry, of Concord, said: "I am a practicing physician and have been for ten years. I graduated from the University, city of New York, medical department, in 1878. I located first in New York, then in Connecticut, and now in Portsmouth, N. H., and am now a member of the New Hampshire State Board of Health. I have been House-Surgeon in St. Francis Hospital, and Assistant Surgeon in Chambers Street Hospital, and Hospital for Ruptured and Crippled, New York—in all, three years. I am a member of the New Hampshire State Society, American Medical Association, and American Public Health Association. Have been Health Officer of Portsmouth, and am now associate editor of the New England Medical Monthly. I have used cotton-seed oil for medicinal purposes ever since beginning practice, and for many years for culinary purposes. Believe it to be wholesome, easily digested and nutritious. Believe the properties of cotton-seed oil of good quality to be identical with those of olive oil, and the former to be superior to a poor

sample of the latter. In my experience no distinction is made in medical practice between the two oils, it being understood that many brands of olive oil, so called, are in reality, wholly or in part, cotton-seed oil. Chemical tests have established the truth of this supposition. Externally applied it is a bland, soothing substance, which acts as a protective dressing like olive oil. Internally it is used for various affections, and differs in its action in no respect from the oil of the olive. So far as I know physicians have no preference as regards the two varieties. I have used it extensively in the preparation of salad dressings, as well as in other ways, and have invariably been pleased with it. Have eaten doughnuts fried in cotton-seed oil, and have been unable to distinguish it from lard similarly used. I have examined the specimen submitted. It has all the ordinary appearance of good cotton-seed oil. Chemical tests show it to be such, and examination with the microscope attests the absence of foreign material, as well as confirms the above tests. Had it used in the kitchen for salads and for frying purposes, and was fully satisfied with the results obtained. In four tests recently made of four samples of olive oil, so called, bought by me, I found only one pure olive oil. The others were cotton-seed oil, partly or wholly. This I determined by chemical tests."

This consensus of testimony from distinguished medical men not only confirms the official statement of the Dispensatory, but establishes every claim the MANUFACTURERS' RECORD has made as to the dietetic value of cotton as compared with olive oil.

The Big American Metal Syndicate.

About a fortnight ago we referred to the formation of the Watts Steel & Iron Syndicate (Limited), with a capital of £250,000, to acquire the interest of Mr. George Reis in arrangements for a business of steel and iron manufacture at Middlesborough, in Bell county, Kentucky, U. S. A. We are now in a position to give further particulars in reference to this undertaking, in which several local capitalists are interested. The new works will be constructed in Cumberland Gap, which is situated at a point where the three States of Tennessee, Kentucky and Virginia join. It is almost the only pass in the Cumberland range of mountains through which a railway can be constructed. Three years ago large tracts of country at Cumberland Gap, which then consisted chiefly of backwoods, were bought by a company called the American Association, Limited, of London. The managing director of that company was Mr. Jacob Higson, of Manchester, and associated with him were Messrs. Edgar and Frank Watts, who are connected with the firm of Watts, Ward & Co., of Cardiff. Mr. Edgar Watts is a mining engineer who served his apprenticeship with Messrs. Forster Brown & Rees, of Cardiff, and who was subsequently agent to the National Colliery Co. Messrs. E. & F. Watts went out to Cumberland and were instrumental with others in forming the Middlesborough Town Co., of which both are directors. Several tracts of country have been leased to various companies for the purpose of working coal, iron ore and limestone, which abounds in the district, and are of the best quality to be found in the United States. To show the phenomenal growth of Middlesborough, we may state that in May of last year there were in the city—of course, according to American ideas, it was a city then—one store and two shanties, and the total population was 25. At the end of

last year the population of Middlesborough was 4,200, and in February of this year it reached 5,000. There are now 38 business houses and residences under

construction, and contracts have been entered into to complete 532 additional buildings by the 1st of May next. Many commodious and well-constructed public buildings have been erected. A large proportion of the shares in the Middlesborough Town Co. are held on this side of the Atlantic, and it is to British enterprise principally that the city has in so short a time grown to the extent indicated. Many industries have already been established there, and the Watts Steel & Iron Co. are now erecting two large furnaces, which they hope will be in blast before the end of this year. The furnaces are constructed on the most improved pattern. Each has a diameter of "bosh" of 17 feet with a height of 75 feet, and the estimated output is 300 tons per day. The process to be used is the basic, and the whole of the steel-making plant will be of the most complete description. The syndicate has secured a magnificent site with a frontage of 2,600 feet, on the Louisville & Nashville Railway, and adjoining the central station at Middlesborough. The syndicate is not at present putting up coke ovens, as several other companies have undertaken this industry, but they have power to do so should they consider it necessary. They will, however, mine their own ores, the whole of which lie in the immediate neighborhood, and have been proved by analysis to be suitable for the manufacture of the best steel. The coal, which is worked by means of levels, is also of excellent quality for coke making. It is believed that Middlesborough is destined to supplant Pittsburgh, because the ore for the works at the latter place must be obtained from Spain or Lake Superior, which is nearly as far. Among the local gentlemen interested in this great metal syndicate are Messrs. Watts, of Cardiff and elsewhere; Mr. Goss, Newport; Mr. James Williams, Newport; Mr. Wilkinson, Risca, and Messrs. J. A. Jones and J. Simpson, of Cardiff.—Iron Trade Circular, Birmingham, Eng., March 22.

Yankee Cities in the South.

The Columbus (Ohio) Dispatch, referring to an article in the Tallapoosa (Ga.) Journal, devoted to the manufacturing interests of that town, thinks that a curious feature of it appears in one of the headlines, where Tallapoosa is called "a Yankee city under Southern sun," and that still another peculiar feature is the boast that in that region they have the climate, iron ore and other facilities, natural and acquired, to lead England in lines growing out of the iron industries.

The Dispatch, "after making due allowance for home pride and the speculator's rather enthusiastic assertions," is dazed when it remembers that these same Yankee cities in the South are enlisted with the native population in the work of whipping England in the iron market "upon the very spot that England sought to turn to her own advantage in the great war, less than thirty years ago."

The surprise of our contemporary in contemplating this new order of things is not to be wondered at. Like many other newspapers, it is unfamiliar with the progress of the South and the work of union and regeneration which has been going on here for the past thirty years. Granting that England "sought to turn this very spot to her advantage less than thirty years ago," the league which the Yankee and the "Rebel" have formed against her and the world in this union of interests, shows how completely the North and South have recovered from the disaster of thirty years since, and are wedded to the upbuilding of our common country. There is no North and no South now, save in the memories of the unforgiving few who are opposed to a union of hands, as they are to a union of hearts.

Yankee cities under a Southern sun are doing a rushing business. We are all happy, and hope to be still happier; and may the good work go on forever.—Atlanta Constitution.

The plants of the McElwee Manufacturing Co., lately mentioned as incorporated for the manufacture of sash, doors and blinds, are located in New York city and Big Rapids, Mich.

Frankfort.—Bills have been introduced in the legislature incorporating the National Contract & Construction Co.; Otter Creek Coal, Iron & Timber Co.; Cooper Mining & Manufacturing Co.; Reynolds Coal, Coke & Mining Co.; East Fork Turnpike Road Co.; Camdenville & Johnsonville Turnpike Road Co.; Wallace Mill Turnpike Road Co.; Harrod's Run Turnpike Road Co.; Bell & Harlan County Turnpike Road Co.; Brushy Fork & Scrubgrass Turnpike Road Co.; Jones' Mill & Rocky Branch Turnpike Co.; Chadwick Ferry Turnpike Co.; Little Jordan Turnpike Road Co.; Persimmon Grove & Grant's Lick Turnpike Road Co.; Junction Turnpike Co., and the Cowan Station & Battle Run Turnpike Road Co.

Fulton.—Match Factory.—Thomas, Rice & Burnett have organized a \$50,000 company to establish the match factory mentioned in last issue.*

Glasgow—Oil and Gas Wells.—C. C. Conroy, lately mentioned under Bruce as to sink a gas well, has about 50,000 acres of oil and gas lands under lease and will sink a number of wells.

Irvington—Flour Mill.—Boyd Bros. will build the flour mill mentioned in last issue. It is to have a daily capacity of 75 barrels of flour and 30 bushels of corn.*

Jackson—Bridge.—The Jackson Bridge Co. has been chartered by the legislature.

Jeffersontown—Turnpike.—A bill has been introduced in the legislature to incorporate the Jeffersontown & Seatonville Turnpike Road Co.

Lebanon—Barrel Factory.—A barrel factory will, it is reported, be established.

Lexington—Cigar Factory.—R. D. Wilson, J. C. Prattier, George Murray and others have started the cigar factory mentioned in last issue.

Lexington—Foundry and Machine Shops.—J. M. Kelly, W. J. Houlihan, J. W. Browning and others are organizing a stock company to establish a stove foundry and machine shops.

Lexington—Land.—W. T. Woodard, J. R. Couch, A. A. Kitzmiller and others have incorporated the Ohio Valley Land Co. to deal in real estate, &c. The capital stock is \$100,000.

Liberty—Turnpikes.—Bills have been introduced in the legislature incorporating the Liberty & Rolling Fork Turnpike Road Co., and the Liberty & Casey's Creek Turnpike Road Co.

Louisville—Brewery.—A bill has been introduced in the legislature at Frankfort to incorporate the Schaeffer-Meyer Brewing Co., lately mentioned.

Louisville.—A bill has been introduced in the legislature at Frankfort to incorporate the Capital Contract Co. with a capital stock of \$150,000, with C. R. Long, R. T. Snowden, H. D. McHenry and others as corporators.

Middlesborough—Coke Ovens.—The Ming Mountain Coal & Coke Co., which has contract to furnish the Watt Steel & Iron Co. with 300 tons of coke daily for three years, as reported in last issue, contemplates, it is stated, building 1,000 coke ovens.

Mitchellsburg—Turnpike.—The Mitchellsburg & Rolling Fork Turnpike Road Co. has applied to the legislature for a charter.

Mt. Sterling—Water Works.—A bill has been introduced in the legislature at Frankfort incorporating the Mt. Sterling Water Works Co., previously reported.

Newport.—A. G. Clark, C. B. Matthews, B. F. Ehrman and others have incorporated the National Electric Car Co. to deal in electrical supplies and street cars. The capital stock is \$1,000,000. This is probably the Newport Car Co. lately mentioned.

Newport—Ice Factory.—George Wiedemann is putting in his brewery machinery for the ice factory mentioned in last issue.

Newport—Oil and Gas Lands.—Robert Waring, E. P. Bradstreet, H. H. Yatum and others have incorporated the Queen City & Lone Star Development Co. to develop oil and gas lands. The authorized capital stock is \$250,000.

Newport—Gas, Oil and Mineral Lands.—J. F. Wright, Robert Waring, E. H. Sabin and others have incorporated the Cincinnati & Southern Development Co. to develop oil, gas and mineral lands. The authorized capital stock is \$100,000.

Newport—Woodenware Factory.—W. H. Forbes, J. S. May, Philip Engelskirger and others have incorporated the American Manufacturing Co. to manufacture woodenware; the capital stock is \$1,500,000.

Newtown—Turnpike.—A bill has been introduced in the legislature incorporating the Newtown & Little Elkhorn Turnpike Co.

Nicholasville—Turnpike.—A bill has been introduced in the legislature at Frankfort to incorporate the Nicholasville & Bethel Turnpike Road Co.

Oakland—Turnpike.—The Camp Creek, Oakland & Powersville Turnpike Co. has been chartered by the legislature.

Owensboro—Bridge.—A bill has been intro-

duced in the legislature at Frankfort to incorporate the Wabash Bridge Co. with a capital of \$1,500,000 to build a bridge across the Ohio river.

Paris—Water Works.—It is stated that Wheeler & Parks, of Boston, Mass., will receive contract to construct the water works lately mentioned.

Pineville—Water Works.—The Pineville Water Co., operating water works, has applied to the legislature for a charter.

Richmond—Sewerage System and Water Works.—The Richmond Water Works & Sewerage Co. has applied to the State legislature for a charter.

Sanders—Turnpike.—Samuel Lewellyn, G. W. Deatherage and Peter Lewellyn have incorporated the Sanders Turnpike Road Co. with a capital stock of \$10,000.

Silver Creek—Turnpike.—The Silver Creek, Scalford Cane & Mt. Vernon Turnpike Co. has been chartered by the State legislature.

Springfield—Turnpike.—The Springfield & Cartwright's Creek Turnpike Road Co. has applied to the legislature for a charter.

Vanceburg—Turnpike.—The Vanceburg & Stout's Lane Turnpike Co. has applied to the legislature for a charter.

Winchester—Cart Factory.—The Chadwick Cart Co., of Olean, N. Y., mentioned in last issue, is reported as to erect a three-story building 65x100 feet, and two-story boiler and engine-house 13x240 feet for its factory.

Winchester—Water Works.—Proposals will be received for constructing the water works lately mentioned. F. P. Pendleton can be addressed.

LOUISIANA.

Alexandria—Sugar Refinery.—The erection of a sugar refinery is projected.

Baton Rouge—Ice Factory.—The Baton Rouge Ice Manufacturing Co., lately mentioned, writes that it will not enlarge its factory at present, but may do so at the close of the season.

Bayou LaCombe—Brick yard.—D. Cousin will start a brick-yard.*

Lake Charles—Dry-kilns.—The Bradley-Ramsey Lumber Co. is erecting four dry-kilns in place of ones recently burned.

Lake Charles—Timber Land.—The Bradley-Ramsey Lumber Co., Lock, Moore & Co. and Perkins & Miller have, it is reported, purchased about 100,000 acres of timber land from the Calcasieu Lumber Co.

Monroe—Oil Mill.—The corporators of "Planters' Oil Mill," lately reported as to build a cotton-seed oil mill, include F. P. Stubbs, J. P. Parker, J. M. Lee, Jr., and others. The capital stock is \$100,000.

Natchitoches—Oil Mill.—The Home Co-operative Cotton seed Oil Co. is reported as chartered to build a cotton-seed oil mill.

New Orleans—Clothing Factory.—The Crescent Manufacturing Co. has been incorporated with T. H. Handy, president, and T. L. Airy, vice-president, to start a clothing factory. The capital stock is \$50,000.

New Orleans—Filtering Plant.—The New Orleans Water Works Co. will probably put in a filtering plant.

Shreveport.—The North Louisiana Hedge Fence Co. has been organized with H. C. Stringfellow, president; W. L. Foster, vice-president, and J. S. Kerley, secretary. The capital stock is \$70,000.

Shreveport—Canning Factory.—The Shreveport Canning & Evaporating Co., mentioned in last issue as to erect a canning factory, has let contract for machinery.

Southwood—Sugar-houses.—L. A. & C. G. Ellis write that the proposed improvements at their sugar-houses mentioned in last issue depend upon what action is taken by Congress on the sugar tariff.

Sparta—Water Works.—The Bienville Water Supply Co. is reported as to extend its mains.

Washington—Cotton Factory.—It is reported that a cotton factory will be erected.

MARYLAND.

Baltimore—Barrel Factory.—The Baltimore Sugar Refinery Co., lately mentioned, will erect a barrel factory 145x330 feet at its sugar refinery.

Baltimore—Foundry.—The iron foundry recently reported as to be located at Curtis Bay will be an L 70 feet wide and 200x250 feet long and will adjoin the South Baltimore Car Works.

Baltimore—Machine Works.—R. H. Woodruff, of Roanoke, Va.; Charles Marshall, J. M. Heiskell and others have incorporated the Baltimore Cigarette Machine Co. to manufacture the Luddington patent cigarette machine. The capital stock is \$700,000.

Baltimore.—The Maryland Ice Co. has issued \$360,000 of bonds.

Baltimore—Publishing.—The Daily Record Co. has been incorporated by H. M. Benzinger, E. J. Farber, John Warfield and others. The capital stock is \$100,000.

Baltimore—Paper Board Factory.—The bill recently reported as introduced in the legislature to allow the Paper Board Manufacturing Co. to issue bonds has been signed by the Governor and become a law.

Berlin—Machine Shops.—The removal of the machine shops of the Baltimore & Ohio Railroad Co. (office, Baltimore) from Martinsburg, W. Va., to Berlin is reported.

Georgetown, D. C.—Bridge.—A bill has been introduced in the legislature to incorporate the Georgetown Union Bridge & Railway Co. with G. G. Boteler, of Virginia; G. W. Cassell, Outerbridge Horsey and others as corporators, to build and maintain an iron bridge on the piers of the present aqueduct bridge. The capital stock is to be \$300,000.

Mechanicsburg—Saw Mill.—C. C. Waters has erected the saw mill mentioned in last issue.

Middleton—Iron-ore Land.—A Baltimore syndicate is reported as leasing six farms east of Middleton, on which iron ore has been found.

Salisbury—Ice Factory.—The Salisbury Ice Manufacturing Co. has been incorporated with W. H. Jackson, president; W. P. Jackson, treasurer; I. S. Adams, secretary. It has contracted with the Hercules Iron Works, of Chicago, for a 13-ton Hercules machine. The capital stock is to be \$20,000.

Sykesville—Bridge.—The county commissioners of Howard and Carroll counties are considering the construction of a bridge over the Patapsco at Gorsuch Switch, near Sykesville.

Westminster—Land.—The officers of the Westminster Land & Improvement Co., reported in last issue as organized, are Edward Lynch, president; C. H. Vanderford, secretary; G. W. Albaugh, treasurer.

Washington, D. C.—Brewery.—The National Brewing Co., of Baltimore, is reported as negotiating with Mr. Block for the purchase of land between Seventh and Eighth and I and K streets whereto to erect a brewery. The property is held at \$27,000.

Washington, D. C.—Electric-light Plant.—A bill has been introduced in the U. S. Congress to incorporate the Washington Electric Lighting Co., with S. M. Bryan, W. W. Rapley, J. G. Gardner and others as corporators, to erect and operate an electric-light plant to furnish light and motive power to the District. The capital stock is to be \$500,000.

MISSISSIPPI.

Canton—Collar Factory.—A collar factory and tannery are reported as to be established.

Corinth—Hoop Factory.—W. R. Boone will start a hoop factory, as stated in last issue, and has purchased machinery.

Jackson—Dry-kilns.—Enochs Bros. will erect two dry-kilns at their saw mill.

Meridian—Fertilizer Factory, etc.—The Meridian Fertilizer Factory, previously mentioned as to build new works, has purchased a site. The company will, it is stated, add the manufacture of chemicals.

Natchez—Saw Mill.—Root & Cummings, of Muskegon, Mich., have purchased all of machinery for their saw mill mentioned in last issue.

Sanford—Saw Mill.—Ware Bros., of Bellevue, are reported as erecting a saw mill.

Vicksburg—Brewery.—Another brewery is reported as to be erected.

Vicksburg—Brick-yard.—Howard, Robertson & Co. will start another brick-yard.*

NORTH CAROLINA.

Asheville—Mining, Manufacturing, etc.—The Western North Carolina Mining & Improvement Co. has been incorporated by A. E. Jenks, C. N. Jenkins and L. B. Rich to purchase and otherwise acquire lands, and to do a general mining, milling and manufacturing business. The capital stock is to be \$50,000.

Bee Bluff—Saw and Shingle Mill.—The Enterprise Land & Lumber Co., of Richardson, is erecting a saw and shingle mill.

Boone—Timber.—A Philadelphia (Pa.) company has purchased 6,000 acres of timber on Dugger creek for \$8,000 of W. L. Bryan.

Bryson City—Stave Factory.—I. R. Keen will start a stave factory.

Durham—Cotton Mill.—W. Duke Sons & Co. write that they do not intend erecting the cotton mill mentioned in last issue at present.

Elizabeth City—Packing Houses.—White & Fleming, of Norfolk, Va., have purchased the ship-yard property of John Brockett and will erect thereon the oyster packing houses recently mentioned.

Enochville—Flour Mill.—Calvin Deal and W. A. Lutz are the purchasers of the flour mill of the Stirewal estate, mentioned in last issue, and intend organizing a company to operate same.

Estatoe—Dry-kiln.—Litchfield & McKay are erecting a dry kiln at their woodworking factory.

Fayetteville—Publishing, etc.—The Fayetteville Printing & Publishing Co. has been incorporated with H. W. Lilly, president; J. R. Williams, secretary and treasurer, to do a general printing, publishing and manufacturing business. The capital stock is to be \$10,000.

Franklinville—Cotton Factory.—W. M. Curtis, O. R. Cox, Dr. Redding and others have, it is reported, organized a company to erect a cotton factory.

Graham—Cotton Mill.—L. B. Holt, mentioned in last issue, has purchased 50 additional looms for his cotton mill.

Greensboro—The South Greensboro Investment Co. has been incorporated by James D. Glenn, W. R. Burges, R. M. Douglas and others with a capital stock of \$100,000.

Greensboro—Ice Factory.—A stock company is reported as organized to erect an ice factory. The capital stock is \$10,000.

Greensboro—Flour Mill.—L. F. Ross, mentioned in last issue, is adding new machinery to his grain mill.

High Point—Brick-yard.—Ingram & Weeden have started the brick-yard mentioned in last issue.

High Point—Chair Factory.—R. J. Lindsay, J. B. Best and C. W. Lindsay have organized a company to erect and operate the chair factory recently reported as to be erected by R. J. Lindsay. It has purchased a site, and will, it is stated, begin work upon the building at once.

Lenoir—Distillery.—Adderholdt & Pope will erect, it is reported, a steam distillery near Lenoir.

Madison—Saw Mill.—The Cambria Mill & Lumber Co. is erecting a saw mill.

Manchester—Box Factory, etc.—The Star Lumber Co., lately mentioned as erecting a dry-kiln, will put in moulding machinery, also box machinery.*

Marion—Iron Furnace, etc.—It is reported that a company has purchased land on which to erect an iron furnace, \$100,000 cotton factory, canning and furniture factory and a tannery. The Old North State Land Co. can possibly give information.

Mount Olive.—The capital stock of the Pioneer Lumber Co., recently reported as incorporated, is \$25,000.

Pittsburgh—Canning Factory.—J. A. Womack will, it is reported, erect a canning factory.

Raleigh—Canning Factory.—W. E. Asheley has made a proposition to erect a canning factory.

Ramoth—Land.—A company with J. B. Boatright at its head has purchased, it is reported, 130 acres of land from Dr. Burnett and others for \$30,000, which it will improve and lay off into lots.

Reidsville—Canning Factory.—A canning factory is projected. A. G. Walters can give information.

Rockingham—Canning Factory.—A. Stewart will establish a canning factory and has ordered machinery for the same.

Salisbury—Granite Quarries.—A. B. Lauderdale, of Mercersburg, Pa.; N. B. McCauley, W. H. Reisner and J. S. McCubbins, Jr., organized the Stone Mountain Granite Co., mentioned in last issue, to develop granite quarries.

Salisbury—Flour Mill.—A roller flour mill 50x100 feet will be erected by J. B. Lanier.

Sanford—Stone Quarries.—W. H. Smith & Co., of Wilmington, recently mentioned as opening brownstone quarries, have leased 387 acres of land and are endeavoring to organize a \$50,000 stock company to develop same.

Tunis—Dry-kilns.—The Tunis-Eccles Co. is erecting four dry-kilns at its lumber mill.

Washington—Canning Factory.—J. W. Keenan, of J. S. Farren & Co., of Baltimore, Md., mentioned in last issue as arranging for the location of a canning factory, will let contract for the buildings and wharf at once. The steam house will be 65x95 feet, and the warehouse 40x90 feet.

Wilmington—Oil and Creosote Works.—The Wilmington Oil & Creosote Co. will, it is stated, enlarge works.

Wilmington—Cotton Mill.—The Wilmington Cotton Mills Co. will put in 2,500 new spindles.

Wilmington.—The Industrial Manufacturing Co. has decided to increase its capital stock to \$30,000.

Winston—Box Factory.—A cigar box factory will be established, it is reported.

SOUTH CAROLINA.

Anderson—Electric-light Plant.—The contract has been let to Roddy & Whitner, of Rock Hill, for the electric-light plant previously reported as probably to be erected by the city.

Blacksburg.—The Blacksburg Land & Improvement Co., reported in last issue, has increased capital stock from \$10,000 to \$50,000 to extend its operations.

Branchville—Canning Factory.—A canning factory is talked of.

Charleston—Ice Factory.—The Charleston Ice Manufacturing Co. will erect, it is reported, an addition to its works and will put in machinery to increase its output from 60 to 90 tons per day.

Charleston.—The Wando Phosphate Co. contemplates increasing its capital stock to \$300,000.

Chester—Gin.—McCallum Bros., mentioned in last issue, will add a cotton gin to their grist and saw mill at West Chester.*

Clinton—Cotton Factory.—An effort is being made to organize a stock company to establish a cotton factory.

MANUFACTURERS' RECORD.

Kershaw—Gold Mines.—The plant at Brewer's mines, it is reported, will be enlarged.

Laurens—Lime Kiln.—G. B. Anderson and J. D. Mesters will increase their capital and probably enlarge their plant in Laurens county.

McClellanville—Land, Timber, etc.—The Wambaw Land & Lumber Co. has been incorporated by J. B. Morrison and H. T. Morrison, of Charleston county, to deal in land, timber, etc. The capital stock will be \$25,000.

Prosperity—Sash and Door Factory.—The Prosperity Investment & Improvement Co., mentioned in last issue, will probably at present erect only a sash and door factory.*

Spartanburg—Bottling Works.—The Post Brewing Co., will, it is stated, start the bottling works mentioned in last issue.

Summerton—Oil Mill, etc.—The Summerton Cotton Seed Oil Mill & Manufacturing Co. has been incorporated with Thomas Wilson, president; S. R. Cole, secretary and treasurer; the capital stock to be \$10,000.

Vance—Distillery.—A. M. Millican has erected a turpentine still.

White Oak—Canning Factory.—The White Oak Farmers' Prize Club contemplates establishing a canning factory in White Oak.

Williamson—Canning Factory.—A canning factory will be erected, it is stated.

Woodruff—Factory.—V. M. Snow will start the manufacture of his compost distributor, as lately stated.*

TENNESSEE.

Bristol—Candy Factory.—S. Goldsmith will start a candy factory.

Buckeye—Coke Ovens.—The Pioneer Coal & Coke Co. will, it is reported, build coke ovens.

Carter's Depot—Mineral Lands.—General Nixon has, it is reported, purchased a large tract of mineral land near Carter's Depot, and will probably develop same.

Chattanooga—Cotton Factory.—A. L. Jones will, it is reported, reopen the old Roub cotton factory in South Chattanooga.

Chattanooga—Shoe Factory.—The East Chattanooga Land Co. is reported as awarding contract to erect a four-story building, 36x125 feet, for the shoe factory previously mentioned, to D. J. Chandler. The factory will, it is said, be operated by a \$150,000 stock company.

Chattanooga—Power Plant.—It is stated that the East Chattanooga Land Co. is considering a proposition to erect a power plant to operate an electric-light plant, gas and water works, saw mill and other industries.

Chattanooga—Gas Works.—The East Chattanooga Gas Light Co. expects to build during the summer the gas works lately mentioned.*

Chattanooga—Coffin Factory.—The Chattanooga Coffin & Casket Co. will, it is reported, enlarge its factory and start the manufacture of coffin linings.

Clarksville—The Clarksville Land & Improvement Co., mentioned in last issue, has been organized with W. M. Daniel, president; F. P. Gracey, vice-president, and L. R. Clark, secretary.

Clarksville—Iron Furnace.—F. P. Gracey writes that the 100-ton coke iron furnace previously reported will be built this summer.

Cumberland Gap.—The Cumberland Gap Park Co. has been chartered.

Ducktown—New Town, etc.—An English company, capitalized at \$5,000,000, has, it is reported, purchased tracts of land near Ducktown, and will lay off a new town to be called Meeksborough. It has also, it is stated, purchased the Ducktown copper mines and will put in new machinery to develop, and erect a fertilizer factory.

Dunlap—Saw Mill.—It is reported that a saw mill is being erected at Shirley's Switch.

Ebenezer—Flour Mill.—The Knox County Union Roller Mill Co., reported in last issue, will build a 50 or 60-barrel flour mill.*

Elk Valley—Coal and Iron Mines.—The Elk Valley Coal & Iron Co. has been incorporated. This is probably the company lately mentioned as formed to develop coal and iron mines at Elk Valley.

Franklin—Water Works.—A Northern company has submitted a proposition to construct water works. The mayor can give information.

Huffstetler's Store—Tile Factory.—E. A. Carpenter will, it is reported, start tile factory.

Iron City.—A wagon factory will, it is reported, be erected. H. P. Seavy can give information.

Jasper—Land.—A syndicate is reported as having purchased 1,600 acres of land near Jasper.

Knoxville—Timber Land.—The Kansas City Furniture Co., Kansas City, Mo., has, it is stated, purchased 114 acres of timber land from Andy Cruse for \$20,000 and will develop.

Knoxville—Tobacco Factory.—McCoy & Hensley will start the tobacco factory lately mentioned.

Le-noirs—New Town.—It is reported that negotiations are pending for the purchase of the Le-noir farm by an Eastern syndicate which intends building an industrial town.

Memphis—Electric-light Plant.—B. M. Stratton is reported as organizing a company to furnish electric lights from primary batteries.

Morristown—Iron Furnace.—It is reported that efforts will be made to organize a stock company to build a 100-ton iron furnace. The Montvue Land Co. can give particulars if true.

Morristown—Medicine Factory.—The Tennessee Medicine Co. has been organized with J. E. Harris, president; S. H. Holston, vice president, and J. W. Donaldson secretary and treasurer.

Morristown—Shoe Factory.—A site for a shoe factory has, it is stated, been purchased. The Montvue Land Co. can probably give information.

Montgomery—Planing Mill.*—The Emory River Boom & Lumber Co. will build the planing mill lately mentioned under Wartburg.

Nashville—Tannery, etc.—The Settle Hill Manufacturing Co., reported in last issue as chartered, has commenced the erection of a two-story brick factory. It will manufacture leather goods.

Nashville—Machine Shop, etc.—It is proposed to locate an industrial school under the auspices of the Freedman's Aid Southern Education Society and move the machine shop of Prof. Sedgewick to the institution.

Pulaski—Flour Mill.—B. F. McGrew is erecting a flour mill.*

TEXAS.

Abilene—Artesian Well.—Henry Sayles will receive bids until June 2 for sinking an artesian well.

Albany—Land.—The James Scott tract of land (4,605 acres) has, it is reported, been sold to Fort Worth parties for \$25,000.

Alvin—Land.—D. L. Slataper has completed the purchase of the 8,000 acres of land lately mentioned.

Aransas City—Harbor.—E. P. Stevenson, U. Lott, R. Houston and others incorporated the Aransas Harbor Co. with a capital stock of \$2,000,000.

Austin—Dam.—The city will hold an election on May 5 to decide upon the issuance of \$1,400,000 of bonds to build the dam across the Colorado river mentioned in last issue. A board has been elected to superintend the work, including S. K. Morley, J. W. Maddox, Frank Hamilton and others.

Beaumont—Ginnery.—A. C. Jones is arranging to erect a cotton ginnery to cost about \$10,000.

Belton—Electric-light Plant.—The Belton Electric Light Co., lately reported as incorporated, has its plant in operation and may put in additional machinery during the year.

Bowie—Brick Works.—A company to start fire-brick works is reported as to be organized.

Brownwood—Canning Factory.—Negotiations are being made for the establishment of a canning factory.

Cameron—Electric-light Plant.—The erection of an electric-light plant is projected. S. Wohlleb can give information.

Comanche—Brick and Tile Works.—T. C. Hill, D. C. Byrne, G. A. Beaman and others have incorporated the Comanche Brick & Tile Co. The capital stock is \$5,000.

Corus Christi—Cotton Gin.—Mr. Binhall, of Waco, is reported as erecting a cotton gin in Cors Christi.

Dallas—Tannery, &c.—G. D. Martin, J. B. Wilson, S. O. Scott and others have incorporated the Dallas Oil, Glue & Tanning Co. with a capital stock of \$100,000.

Dallas—Paper Mill.—John Southerland, of Aberdeen, Scotland; W. W. Lang, and J. N. Wharton have incorporated the Texas Paper Mill Co. with a capital stock of \$50,000.

Denton—Oil Mill.—The erection of a \$60,000 cotton-seed oil mill is projected.

Denton—Electric-light Plant and Water Works.—The erection of an electric-light plant and water works is agitated.

Fort Worth—Furniture Factory.—J. W. Lanson, of 105 W. 1st street, writes that he contemplates erecting a factory in Texas for the manufacture of his patent folding furniture.

Fort Worth.—The Thorne Typesetting Machine Co., lately mentioned, is organized to handle that machine in Texas.

Fort Worth—Beef Refrigerators.—The Texas Dressed Beef & Packing Co. is the name of the company previously mentioned as to be formed by the consolidation of the Fort Worth, Columbus and Victoria refrigerators. R. E. Stafford, of Columbus, can give information.

Franklin—Water Works.—The Franklin Water Works Co. has built the water works previously mentioned.

Galveston—Cordage Factory.—The Galveston Bagging & Cordage Co., mentioned in last issue, has purchased additional twine machinery.

Grand Saline—Stave and Heading Factory.—The Lone Star Salt Co. (office, Dallas) contemplated erecting a stave and heading factory.*

Hallettsville—Ice Factory.—Dallas parties will probably erect an ice factory in Hallettsville.

Houston—Lumber Mill, &c.—J. J. Sweeney has,

it is reported, purchased the plant of the Houston Lumber Co. for \$16,000.

Houston—Barrel and Stave Factory.—The Eureka Barrel & Stave Co. has been organized with C. F. Lange, president; S. L. Hain, secretary, and Marshall Tankersley, manager, for the manufacture of barrels and staves. The capital stock is \$20,000.

Houston.—The Houston Abstract & Title Co. has been organized with J. H. Ruby, president, and R. L. Pollard, secretary, to deal in real estate. The capital stock is \$30,000.

Houston—Land.—B. E. C. Wilson has purchased 3,000 acres of land.

Marble Falls—Water-power.—Joseph B. Frizzle, C. E., of Boston, Mass., is making a survey of the water-power of the Texas Mining & Improvement Co. to prepare plans for its utilization.

Maryville—Brick-yard.—It is reported that another brick-yard will be started.

New Birmingham—Brick-yard.—S. T. Fleshman will start a brick-yard.

Overton—Saw Mill.—W. H. Andrews will rebuild his saw mill, mentioned in last issue as damaged by a boiler explosion.*

Rhome—Flour Mill.—The erection of a flour mill has been commenced.

Tyler—Canning Factory.—The Tyler Canning Co. contemplates enlarging its canning factory.

Vernon—Elevator and Flour Mill.—The Vernon Mill & Elevator Co. is the name of the company recently mentioned as organized to erect a flour mill and elevator. R. D. Gillenwaters is president, and T. M. Cowles, secretary.

Vernon—Flour Mill and Elevator.—Spangler & Co. are reported as having purchased site for the erection of a flour mill and grain elevator.

Waco—Sewerage System.—A. Hinckman, mayor, will receive bids until April 24 for laying 50,000 feet of sewer-pipe.

Wichita Falls—Elevator and Flour Mill.—The Pauhandle Milling & Elevator Co. has been organized with E. W. Taylor, of Fort Worth, president, to erect a 500-barrel flour mill and a 300,000-bushel grain elevator, mentioned in last issue. It is stated that contract for buildings has been let.

Wichita Falls—Electric light Plant and Ice Factory.—A. S. James is president; G. B. Stone, secretary, and L. C. Grant, treasurer, of the Wichita Falls Light & Ice Co., mentioned in last issue. The capital stock is \$25,000.

VIRGINIA.

Alexandria—Land.—The Washington Improvement & Investment Co. has been incorporated with W. J. Rannells, president; J. C. Johnon, secretary, and E. S. Parker, treasurer, all of Washington, to deal in real estate. The capital stock is \$25,000.

Bedford City—Land.—T. W. Spindel is president; W. S. McKenney, vice-president, and S. M. Bolling, secretary and treasurer, of the Otter View Land Co., mentioned in last issue as organized. This company is the purchaser of the 200 acres of land reported last week. The capital stock is to be not less than \$100,000 nor more than \$200,000.

Bedford City—Machine Works.—It is stated that the R. W. Coffee Machine Co., recently reported as incorporated, will operate in Bedford City.

Bedford City—Iron and Steel Works.—The Broxius & Bedford Steel & Iron Co., recently reported as incorporated, will erect, it is stated, its iron and steel works in Bedford City.

Bedford City—Land.—The Greenwood Land Co. has been organized with R. H. T. Adams, of Lynchburg, president; W. C. Judd, vice president; R. S. Quarles, secretary and treasurer, to purchase, lay off into streets and otherwise improve 185 acres of land in the northeastern part of Bedford City. The capital stock is to be \$250,000.

Big Spring Depot—Mining.—The Bent Mountain Iron Mining & Manufacturing Co., previously reported as incorporated, has commenced developing its mineral land near Carnegie.

Buena Vista—Fire-brick Works.—The Buena Vista Fire Clay Co., recently reported as organized, has J. P. Pettyjohn as president; the capital stock to be not less than \$50,000 nor more than \$50,000.

Buena Vista—Stone Quarry.—Jordan & Paxton have opened and will develop a stone quarry.

Cedar Bluff—Land.—The Tazewell Land Improvement Co. is the company lately reported as organized by J. S. Clark, E. J. Collins, H. M. Sill and others to build the new town of Richlands.

Charlottesville.—It is rumored that the Land Improvement Co., the West End Land Co. and the company operating the belt railroad will consolidate with a capital stock of \$1,000,000, to have for its object, among other things, the location of new industries, for which it will expend about \$250,000.

Danville—Machine Works.—A company has, it is reported, been organized with C. G. Holland, president, to manufacture a patent cigarette machine.

Fairfax C. H.—Mining, etc.—The Fairfax & Aluminum, Gold & Silver Mining & Manufactur-

ing Co. has been incorporated with G. P. Brett, president; T. H. Gardner, secretary, and G. W. Bonnell, treasurer, all of Washington, D. C., to purchase, mine and manufacture gold, silver, aluminum and other metals in Fairfax county, the minimum capital stock to be \$100,000.

Fincastle—Marble Quarry.—Alfred Beckley will, it is stated, develop a marble quarry.

Harrisonburg—Tannery.—The J. P. Houck Tanning Co., previously reported as organized to enlarge and operate a tannery, will erect two two-story buildings—one to be 70x21 feet, the other 33x25. W. M. Bucher is superintending.

Harrisonburg—Land.—The Southwest Land & Improvement Co. has been incorporated with J. B. Bigger, president; J. S. Moser, vice-president; J. N. Brenaman, secretary; C. H. Urner, treasurer.

Harrisonburg—Electric-light Plant.—The J. P. Houck Tanning Co., previously reported as to establish an electric-light plant at its tannery, has secured the contract to furnish 76 25-candle-power and 4 32-candle-power incandescent lights for the city at \$750 per year.

Irish Creek—Tin Mines.—Moses Joy, of Boston, Mass., has leased on a royalty the tin mines mentioned in last issue for \$6,000 per year, with the privilege of purchasing within two years at \$200,000.

Iron Gate—Implement Factory.—The Farmers' Alliance Co-operative Manufacturing Co., mentioned in last issue as to locate an agricultural implement factory, will be reorganized with a capital of \$30,000 and will erect a plant to employ about 100 hands. J. Wissler, of Edinburg, Va., is manager and can give particulars.

Iron Gate—Land.—W. W. Sprout, M. M. Roberts and others, of Staunton, are organizing a stock company, to be known as the South Iron Gate Land Co., to purchase 120 acres of land and a limestone quarry south of Iron Gate, on which they have options. If the sale is concluded, the property will be improved and developed. The capital stock is to be \$35,000.

Ivanhoe Furnace—Iron Furnace.—The Ivanhoe Land & Improvement Co. expects to organize the Ivanhoe Iron Co. to build an iron furnace 15x15x70 feet.

Ivanhoe Furnace—Water Works.—The Ivanhoe Land & Improvement Co. is the company mentioned in last issue as organized with W. C. Van Doren, president, and G. M. Seely, secretary. It has purchased 1,000 acres of land and proposes to expend \$170,000 in constructing water works and making other improvements. The capital stock is \$300,000.

Ivanhoe Furnace—Planing Mill.—Pierce Bros. & Co. have put in new machinery and made other improvements at their planing mill mentioned in last issue.

Lexington—Lamp Chimney Factory.—W. H. Waddell, S. O. Campbell, R. S. Anderson and others have organized a stock company to manufacture the Waddell patent lamp chimney.

Lynchburg—Machine Works.—It is reported that a company manufacturing automatic cut-off engines will establish works for the manufacture of the same at Lynchburg, provided a joint stock company can be organized with a paid-in capital stock of \$125,000 to \$150,000.

Lynchburg—Factory.—It is reported that a manufacturing plant will be erected upon the site of the Dabney foundry.

Lynchburg—Sewing Machine Factory.—It is probable that a plant for the manufacture of a patent attachment for sewing machines for foreign markets will be located at Lynchburg.

Manchester—Foundry.—A proposal has been made to the city council by the Johnson Axle Co., of Richmond, to locate its foundry in Manchester, provided a site 400x800 feet is donated.

Mount Athos—Manganese Mine.—A manganese mine is being developed by Lerner, Troeger & Co.

Norfolk—Marble Works.—John D. Couper contemplates putting steam machinery in his stone works.*

Petersburg—Ice Factory.—J. B. Worth & Co. have contracted for machinery for the ice factory mentioned in last issue.

Portsmouth—Electric-light Plant.—The Citizens' Light, Heat & Power Co. has let contract for its plant mentioned in last issue.

Pulaski City—Brick Works.—The Pulaski Development Co. expects to secure the location of brick works on its property.

Pulaski City—Foundry and Machine Works.—J. W. Robinson and others have organized a stock company to locate works for the manufacture of cars, car-wheels and mining machinery. Mr. Robinson is president of this company.

Pulaski City—Iron Furnaces.—The Pulaski Development Co. will build a 150-ton coke iron furnace at once, and the Peak Knob Iron Co. will build its furnace, recently mentioned, at a later date.

Radford—Land.—The South Radford Co. is the name of the company mentioned in last issue as organized and purchasing 300 acres of land from M. Gibson.

Richmond—Bridge.—The construction of a

\$60,000 iron bridge from the terminus of Fifth street to the Meadow Bridge road is projected.

Roanoke—Rolling Mill.—J. Allen Watts and others are organizing the stock company mentioned in last issue to build a plate rolling mill.

Roanoke—Ice Factory.—The stock company mentioned in last issue as purchasing the plant of the Diamond Ice Co. has been incorporated as the Diamond Ice Co., with L. H. Simmons, president; J. T. Egleby, vice-president; J. T. Moffett, secretary and treasurer. The capital stock is to be not less than \$50,000 nor more than \$60,000.

Roanoke—Shirt Factory—Mark Day, of Baltimore, Md., will establish, it is reported, a shirt factory in Roanoke.

Roanoke—Bridge Works.—Walton, Wentworth & Hunter, composing the American Bridge & Iron Co. will organize a \$200,000 stock company to conduct the business of the same.

Roanoke—Machine Works.—The Roanoke Domestic Ice Machine Co. has been organized with W. P. Huff, president; J. K. Simmons, vice-president; W. M. Wellford, secretary and treasurer, to erect a plant for the manufacture of a patent ice machine.

Roanoke—Land.—The Janette Land Co. has been organized and purchased the Lewis tract of 60 acres of land for \$135,000.

Roanoke—Land.—The Fairmount Land Co. has been organized with J. F. Christian, president; S. Crumpacker, of Botetourt, vice president; C. A. Moonaw, secretary; J. B. Fishburne, treasurer, to develop 60 acres of land recently purchased.

Salem—Steel Plant.—It is stated that a site has been selected for the steel plant previously mentioned. It is to be the McCarty basic process and cost \$552,000. W. F. M. McCarty of Lynchburg, can give particulars.

Salem—Sash, Door and Blind Factory.—S. C. Adams, of Chatham, will move his machinery to Salem, it is stated, and establish, with increased capacity, a sash, door and blind factory.

Salem—Silk Factory.—The location of a silk factory is contemplated. The Salem Improvement Co. can give information.

Salem—Real Estate.—The Valley Building & Investment Co. has been organized with Dr. Leigh Buckner, president; J. G. Kuykendall, vice-president; D. H. Scott, secretary and treasurer, to purchase and improve real estate. The capital stock is \$25,000.

South Boston—Iron Mines.—Philadelphia (Pa.) parties have optioned the Jordan iron ore property on the Lynchburg & Durham Railroad, and will probably purchase and develop the same.

South Boston—Land.—The South Boston Land Improvement Co. has optioned town property and between 40 or 50 acres adjoining the town of Alexander Bruce, it is reported, and will lay off and improve the same if it purchases.

Speedwell—Iron Furnaces, etc.—The Pulaski Development Co. purchased the iron furnaces, mineral land, etc., of the Speedwell Iron Co., as reported in last issue.

Suffolk—Dry kiln.—H. W. Bradshaw will erect a dry-kiln at his planing mill.

Suffolk—Kindling-wood Factory.—W. A. Allen will erect, it is stated, another kindling-wood factory to have double the capacity of the present one.

Vinton—Land.—The Fairview Land Co. has been organized with C. H. Huffman, president; E. A. Parsons, vice-president; D. R. Bowman, secretary and treasurer, and purchased the farm of G. Gunz for \$20,000.

Virginia—Land.—The Old Dominion Coal, Coke & Iron Co. has been organized with R. H. Woodrum, president; W. E. Harris, of Big Stone Gap, vice-president; W. S. McClanahan, secretary; J. W. Coon, treasurer. It proposes to organize several companies, to which it will lease its 50,000 acres of land in Wise and Dickenson counties, purchased at \$750,000. The capital stock is \$1,000.

Wytheville—Land.—A syndicate has purchased, it is stated, the Whitman property and will organize into a stock company for the development of the same.

WEST VIRGINIA.

Alderson—Land.—H. A. Holt and A. F. Matthews, of Lewisburg; E. H. Smith, A. McV. Miller and others have purchased \$14,000 of land.

Buckhannon—Electric-light Plant.—An electric-light plant will probably be erected.

Charleston.—Baltimore (Md.) parties have chartered the Ashland Coal & Coke Co. with an authorized capital stock of \$500,000.

Clarksburg—Creamery.—The erection of a creamery is probable. Prof. J. A. Meyers, of Morgantown, can give information when definitely decided.

Eureka—Oil Wells, &c.—J. S. Davis and Frederick Hays, of Philadelphia, Pa., have, it is reported, leased 6,000 acres of oil lands and will sink wells at once.

Eureka—Oil Wells.—Wheeling capitalists have leased 50 acres of the G. L. Ruddle farm and will sink oil wells.

French Creek—Oil Wells.—J. A. Miller, R. K. Friend, R. E. Hall, of Wheeling, and others have organized the French Creek Eureka Oil Co. It has leased the farm of David Dye and will sink oil wells. Capital stock is \$11,000.

Morgantown—Brick-yard.—The Morgantown Brick Co., mentioned in last issue, will start a brick-yard.

Moundsville—Foundry and Machine Shops.—James R. Jones will increase the capacity of the foundry and machine shops of the Moundsville Manufacturing Co., mentioned in last issue.*

Parkersburg—Saw Mill.—David Pew will, it is reported, erect a saw mill on Oil Spring.

Pedlar's Run—Oil Wells.—E. M. Hukill will sink an oil well on the Fox farm, and the South Penn Oil Co. on the Verner farm.

Pickaway—Creamery.—The Pickaway Creamery Co. will, it is reported, increase facilities, adding a separator, and resume operations.

Piedmont—Flour Mill.—J. C. Fredlock & Co. are enlarging their flour mill.

Powhatan—Coal Mines.—The Lynchburg Coal & Coke Co. has been organized with R. H. T. Adams, president, and N. Fitzhugh, general manager, and will develop its coal mines near Powhatan.

Ritchie County—Oil Wells.—J. K. Bartlett, of 201 Mt. Royal avenue, Baltimore, Md., and Hayes & Davis, of Philadelphia, Pa., leased the 18,000 acres of oil lands in Ritchie and Wirt counties as stated in last issue. They have started three wells and will sink others, and will be known as the Southern Oil Co.

Rockport—Oil Well.—A Pittsburgh (Pa.) firm has leased oil lands and will sink a well.

Tate Creek—Oil Well.—L. L. Johnston is sinking an oil well.

Volcano—Oil Well.—C. F. Pontius has sunk an oil well and contracted for another.

Wheeling—Electric-light Plant.—The Wheeling Electric Co. will probably change the location of its plant.

BURNED.

Cross Keys, Va.—The stave factory of Brown Reddish; loss \$2,000.

Fayetteville, N. C.—The steam saw mill of J. A. McArthur in Seventy-First township damaged by a boiler explosion.

Iron City, Tenn.—The saw and planing mill of the R. F. Porch Manufacturing Co.

Littleton, N. C.—The distillery of James House; loss \$1,500.

Mitchell's Station, Va.—E. L. Taylor's saw mill.

Owensboro, Ky.—The saw mill of J. W. Perry damaged by rain storm.

Quitman, Ga.—The saw mill of G. D. Purvis. Will rebuild.

Sanford, Fla.—The mill of W. Edgar; loss \$500.

St. Albans, W. Va.—The grist mill of E. Wheeler damaged by boiler explosion.

Union City, Tenn.—The spoke factory of Beck & Gardner, and the harness and saddle factory of H. Dietzel.

Wentworth, N. C.—The Rockingham county jail.

IRON GATE, VA., April 2, 1890.—The Farmers Alliance Co-operative Manufacturing Co., whose factory and machine shops were destroyed by fire at Edinburg, Va., have secured a site for a new plant at Iron Gate, and will erect buildings consisting of a large foundry and machine shops, to employ, as the business may demand, from one hundred to three hundred hands. The buildings first erected will have a floorage of 20,000 feet, and will be filled with the latest improved machinery for converting wood and iron into farming implements. The company was organized a year ago, but will be re-organized April 15 with a capital of \$30,000, which will be increased to \$50,000. J. Wissler, of Edinburg, is manager, and has charge of re-building the plant and contracting for machinery.

H.

BARBOURSVILLE, KY., April 4, 1890.—Two brick manufacturers will be started here at once, each of a capacity of 40,000 brick per day. One of the plants is here already, and the other one will be here within the next week. We are trying to make arrangements now to bore for oil at this place, and want to let the boring of the well by contract, or purchase machinery for that purpose. We will build several miles of street railway, and also want to purchase cars and rolling stock; also want to buy at once a light locomotive and cars necessary for the purpose of handling coal, rock, dirt, &c. A steam laundry will soon be established, and machinery for that purpose will be needed; also a spoke and hub factory, machinery for which will have to be purchased.

BARBOURSVILLE LAND & IMPROVEMENT CO.

SAVANNAH, GA., April 4, 1890.—The Continental Chemical Co. is permanently organized, and are now doing business. We are all that our title conveys; besides, we are in for the manufacture of chewing gum and mineral soda water. We are open for bids from parties supplying above machinery.

SAMUEL K. PLATSHEN, Sec'y.

Land Investments at Salem, Virginia.

The capital stock of the Salem Improvement Co.—\$300,000—cost the original subscribers \$2 a share, says the Salem (Va.) Times-Register, only two assessments of 10 per cent. each having been paid when the 80 per cent. dividend was declared, making the stock fully paid up. This stock is now selling at \$23 a share (the shares being \$10 each)—that is, the stock is bringing 130 per cent. above par, or more than 1,000 per cent. profit to original subscribers in six months. If there is anything to beat that in a half year in the development of this country, we would like to know what it is.

The West Salem Land Co. has paid its stockholders more than 400 per cent. profit in less than four months. The stock of the Development Co., Glenmore, and other companies is bringing very large premiums on the amount paid in, and everybody in Salem is financially happy.

THE great increase in the use of creosoted piles and timber is shown by the orders and inquiries for creosoted material that are daily received by the Carolina Oil & Creosote Co., of Wilmington, N. C. That company has been obliged to rebuild a part of its works that were destroyed by fire, and now we learn that in consequence of heavy contracts they are compelled to enlarge their works. The Wilmington Messenger of late date contains the following list of orders on file, that shows how widely extended a market this comparatively new Southern industry has reached:

"A large quantity of creosoted piles and timber for the Nicaragua Canal Co., to be used in building a pier and breakwater at Greytown. One vessel is now taking on a cargo for Greytown, and two others are expected here in a few days for the same purpose.

A large lot of piles for the Southern Construction & Quarry Co., engaged in building the custom-house wharves in Charleston, S. C.

A large lot of creosoted lumber for the under-ground electrical conduits in the city of Philadelphia.

About 350,000 feet of creosoted timber for the new long bridge at Chattanooga, Tenn., being built by the Smith Bridge Co.

Creosoted piles and lumber for the United States Life Saving Station at Huntington bay, on the Pacific coast, near the Oregon boundary—to be shipped by rail to San Francisco.

All the creosoted timber for the new United States government dry-dock, now under construction at the United States navy-yard at League Island.

Creosoted sewer staves for the Department of Docks, New York city."

FULTON, KY., April 5, 1890.—We have organized here a company for the purpose of manufacturing a patent double headed match with a capital stock of \$50,000. Will have to purchase a machine to cut splints.

THOMAS, RICE & BURNETT.

TALLAPOOSA, GA., April 5, 1890.—The common council of Tallapoosa, Ga., have granted to Wm. Keith & Co., of New York, a franchise for a system of water works for the city; three miles of 10-inch mains, 30 hydrants; works to cost \$50,000. TALLAPOOSA LAND, MINING & MFG. CO.

EBENEZER, TENN., April 1, 1890.—The Knox County Union Roller Mill Co. was organized last Friday, and are now ready to take bids on the furnishing and placing of the machinery for a 50 to 60-brl. flouring mill. The machinery is to be new throughout. J. V. FULKERSON, Bus. Mgr.

VICK'S MAGAZINE for April is at hand. It contains a great deal of information for floriculturalists and others, and will be opportune reading for those contemplating gardening of any kind. Published by James Vick, seedsman, Rochester, N. Y.

IN ITS "Waifs from Wall Street" column, the Boston Commercial Bulletin of last week had the following note concerning Southern stocks: "The Southern stocks have done well during the week, and indeed these roads seem to have on the whole a very persistent and powerful group of friends. Louisville & Nashville has been handicapped in many ways. First, there was the \$13,000,000 new stock to be absorbed. Later on, the tornado in Louisville and the Mississippi floods have been used as bear arguments. But in these two calamities the road has had singular good fortune. The tornado passed within a couple of blocks of the Louisville & Nashville's city property, but did not touch it. The overflows of the Mississippi have not affected the Louisville & Nashville's roadbed. Where the railroad touches the river there has been no disaster, and the interior east of the Mississippi, from which the road draws its business, has been scarcely affected by the neighboring calamities. The stock was sold down on both events, but has rallied again and is just now a mainstay of the market. Richmond Terminal is another property which numbers among its friends some of the strongest houses of New York, and in the last few days it has been rising to the dimensions of a bull feature in the market. The company has made several advantageous arrangements, in its financial and legal relations, which have greatly improved its position; and these have not, in the opinion of its supporters, been adequately discounted in the movement of prices.

CHATTANOOGA, TENN., April 5, 1890.—Have charter for gas works, and expect to begin work during the summer; also have charter for electric-light and power plant. S. W. DIVINE.

Foreign Exchange Quotations.

ALEXANDER BROWN & SONS.

BALTIMORE, April 9, 1890.

	Selling.	Commercial.
60 days.....	48½	48½@48½
3 days.....	48½	
France.—		
Selling.		Commercial.
60 days.....	51½	50½@51½
3 days.....	51½	
Reichmarks.—		
Selling.		Commercial.
60 days.....	95%	60 days..... 94½
3 days.....	95%	3 days..... 94½
Guilders.—		
Selling.		Commercial.
x days.... 40%		60 days..... 30%
3 days.... 40%		3 days..... 40%

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, April 9, 1890.

	Virginia 6's Consols C.	40	42
Virginia 6's, new.....		66%	
N. Carolina 6's, C.....		97	
Norfolk Water 8's, C.....	131		
Baltimore & Ohio.....	58	59	
Northern Central.....	68	70	
Central Ohio.....	49		
Pitts. & Con. 1st 7's.....	115	115	
Northern Central Gold 6's C 1900.....	117	117	
do do 6's C 1904.....	119½		
do do 5's (series A).....		111½	
do do 3's (series B).....		110½	
Ga. Car. & N. 5's.....	103	103	
Cin. Wash. & B. (En B. & O.) rd 3's.....	25		
Ohio & M. 2d.....	121		
Ohio & M. 1st S. DIV. 7's.....	115		
Atlanta & Char. 1st, 7's.....		121½	
Atlanta & Char. Income 6's.....		103½	
Col. & Green 1st, 6's.....	107	108½	
Char. & Green, 2d, 6's.....		83	
Va. Midland, 1st, 6's.....		120	
Va. Midland, 2d, 6's.....		118½	
Va. Midland, 3d, 6's.....		109½	
Va. Midland, 5th, 6's.....		100½	101
Char. & Aug. 1st, 7's.....	109		
West Va. Central 1st, 6's.....		108½	108½
Ga. Pacific, 1st, 6's.....	113		
Va. Pacific ad.....		79½	80½
Cape Fear & Y. Valley 6's, A.....	103		
Cape Fear & Y. Valley 6's, B.....	102		102½
Cape Fear & Y. Valley 6's, C.....	102½		103
Consolid'd Gas Stock.....	48%	48%	
Consolid'd Gas Bonds 6's.....		114½	
Canton Co.	50	50	

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Artesian Well.—Henry Sayles, chairman of artesian well committee, Abilene, Texas, will receive proposals until June 2 for sinking a 3,500-foot artesian well.

Barrel and Hoop Machinery.—J. L. Daniel, Dyersburg, Tenn., wants oil barrel machinery also hoop machinery to make hoops six to nine feet in length.

Boiler and Engine.—Boyd Bros., Irvington, Ky., want a boiler and engine.

Boiler and Engine.—N. J. Gorsuch & Son, Westminster, Md., want a second hand boiler and engine.

Boiler and Engine.—Howard, Robertson & Co., 106 Walnut street, Vicksburg, Miss., want a 40 horse-power steel boiler, return flue, and a 40 horse-power engine.

Broom Factory—Machinery is wanted for a broom factory. Address Box 291, Birmingham, Ala.

Brick-yard.—The Morgantown Brick Co., Morgantown, W. Va., will probably purchase machinery for brick-yard within ten days.

Brick yard.—D. Cousin, Bayou LaCombe, La., wants horse-power brick machinery.

Canning Factory.—A. G. Walters, Reidsville, N. C., wants prices and information on complete outfit for a canning factory of from 2,500 to 5,000 cans daily.

Canning Factory.—Willis M. Bell, Drawer N., Tallahassee, Fla., wants prices on machinery for a canning factory of 3,000 cans daily capacity.

Carriage Factory.—Harris & Chamberlin, Lynchburg, Va., expect to soon put machinery in their carriage factory.

Cars.—The Pulaski Street Railway Co., Pulaski City, Va., will purchase cars and entire equipment for its dummy railroad. Address L. S. Calfee, Pulaski City, Va.

Cars, &c.—The Barboursville Land & Improvement Co., Barboursville, Ky., will purchase rolling stock for a street railway, and also cars for handling coal, etc.

Chair and Furniture Factory.—L. F. Dickson, Opelika, Ala., wants prices on machinery for a chair and furniture factory.

Chewing Gum Factory.—The Continental Chemical Co., Savannah, Ga., wants bids on machinery for a chewing gum factory.

Cotton Factory.—Caleb Motz, Lincolnton, N. C., wants a picker, several twisters, slubber, speedle, etc.

Cotton Gin.—McCallum Bros., Chester, S. C., want a cotton gin and press.

Cotton-seed Oil Mill.—The Planters' Oil Mill, Monroe, La., will want complete outfit for a 60-ton cotton-seed oil mill.

Creamery and Cheese Factory.—W. M. Bell, Drawer N., Tallahassee, Fla., wants prices on machinery for a creamery and cheese factory.

Drill Press.—J. H. Gillon, Waycross, Ga., will purchase a drill press.

Dummy Engine.—The Pulaski Street Railway Co., Pulaski City, Va., will purchase an engine for its dummy railroad. Address L. S. Calfee, Pulaski City, Va.

Electric Plant.—The Ridgedale Electric Light & Power Co., Chattanooga, Tenn., will want machinery for an electric-light and power plant.

Electrical Equipment.—The Gay Street Improvement Co., Knoxville, Tenn., wants prices on electrical enclosures, alarms, etc., for hotel.

Elevator.—The Alamo Fire Insurance Co., San Antonio, Texas, desires prices on a water-power or steam elevator.

Elevator.—The Gay Street Improvement Co., Knoxville, Tenn., wants prices on elevator for hotel and hydraulic power for same.

Engine.—William M. Hazzard, Annandale, S. C., wants an engine for a steam lighter.

Engine.—Simmons & Simpson, Toccoa, Ga., want prices on a 40 horse-power engine.

Engine.—J. A. Peter, Hartsell's, Ala., wants to exchange a center crank engine, 8x12, for a 25 horse-power engine, new.

Flour Mill.—N. J. Gorsuch & Son, Westminster, Md., want machinery for a 100-barrel flour mill.

Flour Mill.—The Knox County Union Roller Mill Co., Ebenezer, Tenn., wants bids on new machinery for a 50 or 60-barrel flour mill.

Flour Mill.—Boyd Bros., Irvington, Ky., want a complete outfit of machinery for a mill to have

a capacity for 75 barrels of flour and 300 bushels of corn meal per day.

Flour Mill.—Catalogues of flour mill machinery are wanted by B. F. McGrew, Pulaski, Tenn.

Furniture Factory.—Wetherhorn & Fischer, Charleston, S. C., want the latest improved machinery for a furniture factory. Will purchase about May 1.

Furniture Factory.—Simmons & Simpson, Toccoa, Ga., want prices on machinery for a furniture factory, including dry kiln.

Gas Works.—S. W. Divine, Chattanooga, Tenn., desires the address of manufacturers of gas machinery.

Grist Mill and Gin, &c.—A. J. Wilson, Peyton, Ga., wants prices on a grist mill and cotton gin; also a six horse-power engine.

Heating Apparatus.—Jake Frank, Washington, D. C., wants prices on hot water heating apparatus for club-house to be erected.

Ice Machine.—W. E. Saunders, Forsyth, Ga., wants a small ice machine.

Ice Machinery.—The Adams Laundry Machine Co., Troy, N. Y., wants the address of manufacturers of ice-making machinery.

Iron and Woodworking Machinery.—V. M. Snow, Woodruff, S. C., will purchase iron and woodworking machinery during the summer.

Iron Roofing.—The Hope Hotel Co., Hope, Ark., wants prices on iron roofing for its hotel.

Locomotive.—The Barboursville Land & Improvement Co., Barboursville, Ky., will purchase a light locomotive.

Laundry.—The Barboursville Land & Improvement Co., Barboursville, Ky., wants machinery for a steam laundry.

Machine Shops.—The Eureka Machine Shops, Tallahassee, Fla., wants drilling machines and planers; also the address of parties handling new and second hand machinery.

Machinery.—The Pulaski Ice Co., Pulaski, Tenn., desires to purchase machinery to operate at its factory in winter.

Marble Works.—John D. Couper, Norfolk, Va., wants catalogues and prices on light machinery for sawing, rubbing and finishing marble.

Match Factory.—Thomas, Rice & Burnett, Fulton, Ky., want a machine to cut splints for a match factory.

Mattress Factory.—J. M. Berry, Liberty, Va., wants machinery for shuck and mattress factory.

Mining.—F. V. Moose, Dahlonega, Ga., wants price of "giant" and 1,000 feet of 6-inch piping for gold mining, delivered at Gainesville, Ga.

Oil Well.—The Barboursville Land & Improvement Co., Barboursville, Ky., desires to contract for sinking an oil well or purchase machinery for that purpose.

Pipe.—Frank D. Arthur, manager of the Deptford Land & Improvement Co., South Pittsburg, Tenn., wants bids on 6-inch, 4-inch and 3-inch cast iron water pipe, delivered f. o. b.

Rails.—The Pulaski Street Railway Co., Pulaski City, Va., will purchase rails for a dummy railroad. Address L. S. Calfee, Pulaski City, Va.

Rails.—A. D. Jones, Raleigh, N. C., wants to correspond with parties desiring to lease or sell on time five miles of light iron rails.

Rolling Mill.—Machinery will probably be wanted by J. Allen Watt, Roanoke, Va., for a plate rolling mill.

Rope Factory.—F. F. Cooper, Florence, Ala., desires prices on machinery for a small rope factory.

Sash and Door Factory.—The Prosperity Investment & Improvement Co., Prosperity, S. C., may purchase sash and door machinery.

Saw Mill.—J. L. Draper, Somerville, Ala., wants prices on a large saw mill.

Saw Mill.—W. H. Andrews, Overton, Texas, will purchase some machinery for a saw mill.

Slate and Metal Shingles.—Hendrix College, Altus, Ark., will soon want prices on slate and metal shingles for its buildings to be erected at Conway. R. C. Millar can be addressed.

Spoon Factory.—W. M. Bell, Drawer N., Tallahassee, Fla., wants prices on machinery for a small soap factory.

Soda-water Factory.—The Continental Chemical Co., Savannah, Ga., wants bids on machinery for a mineral soda water factory.

Spoke and Hub Factory.—The Barboursville Land & Improvement Co., Barboursville, Ky., wants machinery for a spoke and hub factory.

Stave and Heading Factory.—The Lone Star Salt Co., Dallas, Texas, wants prices on machinery for the manufacture of staves and heading.

Steam Heating Apparatus.—The Gay Street Improvement Co., Knoxville, Tenn., wants prices on steam heating apparatus for hotel.

Steam Pump.—James R. Jones, Moundsville, W. Va., wants a steam pump.

Stone Crusher.—Buckhannon, W. Va., will want a stone crusher if the issuance of bonds for street improvements is voted by the people. D. C. Hughes is mayor.

Wagon Factory.—Hudman Bros. & Co., Opelika, Ala., will purchase machinery for a wagon factory.

Water Works.—Bids are wanted for the construction of water works at Winchester, Ky. Address F. P. Pendleton.

Windmill.—Jake Frank, Washington, D. C., wants prices on a windmill.

Wire Fence Factory.—The Huntsville Fertilizer & Milling Co., Huntsville, Ala., desires information as to machinery, etc., for manufacturing wire fencing.

Woodworking Machinery.—The Star Lumber Co., Manchester, N. C., wants moulding machinery, also box machinery.

Quarrying Machinery, &c.—The W. C. Green Brick Co., Pittsburgh, Kansas, wants a channeller, gadder and other machinery for a stone-yard and quarry; also derrick riggings.

For electric light it is also useful and valuable in the dynamo room. By furnishing a constant supply of fresh air men can stand longer hours and do 20 per cent. more work; will keep the room cool during warm weather, greatly lessening the tendency to heat of machines as well as bearings.

For engine-rooms, laundries, carpet works, foundries, hotels, rubber factories and manufactories in general such a ventilating fan is equally useful and valuable, and will be found a real necessity and not a luxury by concerns adopting it. Employees do a larger per cent. of work and



THE AKRON ALUMINIUM EXHAUST DISK WHEEL.

tages claimed are: Durability and efficiency, nearest to noiseless, and having a greater capacity than any other made for size and power employed. They are constructed to move air against any pressure, however slight, and will blow without back lash. They can be placed and run in any position.

For rapid drying of malt they drive off every particle of steam and will save 10 to 15 hours' time besides labor and expense, and increase a kiln capacity 25 to 60 per cent. It dries malt evenly and produces soft, pale malt.

For wool drying a 34-inch wheel will drive the steam entirely out of a dry-house 25x35x11, when you cannot see through it, in less than two minutes. It can dry in one-half the time with cold-air blast than with natural draughts, and will do more work with less expenditure of power than any other ventilator on the market.

Used in laboratories and chemical works, this fan will reduce the temperature, drive off all fumes and render the rooms more wholesome.

In stores and restaurants the temperature can be reduced 25 to 40 degrees. This would certainly be gratifying to customers and employees who have heretofore been obliged to tolerate the excessive dead

heat. The expense would be very small indeed compared with the beneficial results obtained.

Mine ventilation is one of the most important uses for the Akron ventilator, which will draw the foul air out through the ducts, creating a partial vacuum in the main shafts and levels into which the fresh air rushes. The ducts can be extended as the levels are extended. The workings are thoroughly ventilated.

For paper drying this apparatus saves thousands of dollars to paper-makers, drying paper successfully and rapidly.

For electric light it is also useful and valuable in the dynamo room. By furnishing a constant supply of fresh air men can stand longer hours and do 20 per cent. more work; will keep the room cool during warm weather, greatly lessening the tendency to heat of machines as well as bearings.

For engine-rooms, laundries, carpet works, foundries, hotels, rubber factories and manufactories in general such a ventilating fan is equally useful and valuable, and will be found a real necessity and not a luxury by concerns adopting it. Employees do a larger per cent. of work and

do it better in well ventilated places.

The Akron blast system of heating, ventilating and cooling schools, churches, theatres, hotels, mills, factories, hospitals, prisons and private houses has so much merit and practicability to recommend it to universal adoption that it will, no doubt, come into general use when fully understood. A treatise showing principles, fully illustrated, will be mailed free upon application to the Akron Heating & Ventilating Co., Akron, Ohio.

EMINENT among the causes now inciting large emigration to the South are vast beds of various qualities of iron ore, enormous deposits of coking and other coals, and the timber supply, to say nothing of the kind climate and fertile soil, with their unfrozen rivers and abundance of almost every industrial element. It is impossible to keep the energy and capital of the country away from these natural resources; and when the junction is made the results are marvelous, as is seen in Chattanooga, for example, rising from a village in 1865 to a city of 50,000 inhabitants in 1890, and one of the great manufacturing centers of the country. This is but one of many such instances in the South, only less in degree.—Boston Commercial Bulletin.

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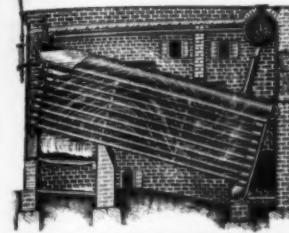
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For Old Point Comfort, Norfolk and the South.

Steamers leave daily (except Sunday) Union Dock 6:30 P. M., Canton Wharf 7 P. M.; arrives Old Point Comfort 7 A. M., at Norfolk at 8 A. M., Portsmouth 8:15 A. M. At OLD POINT COMFORT connect with CHESAPEAKE & OHIO RAILROAD for Richmond, Charlottesville, Greenbrier, White Sulphur Springs, Louisville, Cincinnati and all points West. At NORFOLK with NORFOLK & WESTERN RAILROAD for Petersburg, Richmond, Lynchburg, Roanoke, Bristol, Knoxville, Chattanooga, Memphis and the Southwest; also with the NORFOLK SOUTHERN RAILROAD for Elizabeth City, Edenton and Eastern North Carolina. At PORTSMOUTH, VA., with SEABOARD & ROANOKE RAILROAD for Weldon, Raleigh, Southern Pines, Charlotte, Fayetteville, New Bern, Wilmington, Charleston, Columbia, Augusta, Savannah, Jacksonville and all PRINCIPAL SOUTHERN CITIES.

Palace Steamers, Unsurpassed Cuisine, Undisturbed Night's Rest. Sure Connection. For Tickets and information apply at Company's Office, 129 E. Baltimore St., or on board steamers. E. BROWN, G. T. A. KENNON JONES Agent.

WANTS.

BASIC STEEL.—A man of experience in the production of Basic Steel desires a position as Superintendent or Assistant to General Manager. Address "BASSCHE," care Manufacturers' Record, Baltimore, Md.

WANTED FOUNDRY FOREMAN.—A first-class man, one who understands iron work, as well as green sand. Address ROME FOUNDRY & MACHINE WORKS, Rome, Ga.

WANTED.—Man to take management and \$3,000 stock in Basket and Package Factory. Good opening for right man. Apply to FORT PAYNE BASKET & PACKAGE CO., Fort Payne, Ala.

WANTED.—Situation by an Engineer acquainted with the Shay Locomotive. Can refer to the manufacturers of the Shay Locomotive at Lima, Ohio. Address W. V. ELLIOTT, Shorters, Ala.

WANTED.—Situation as Foreman by an energetic practical mechanic, thoroughly posted in all branches of the planing mill business. Well qualified to take entire management. Experience and references first-class. Address "MECHANIC," care Manufacturers' Record.

WANTED.—Situation as Overseer of Weaving by a young man 30 years of age, married and strictly temperate. Thoroughly understands weaving, can make any class of cotton goods from sample and figure out all changes in connection with weaving. Now employed but desires to go South. First-class record. Address "SLIDE RULE," care Manufacturers' Record.

WANTED.

CAPITALISTS SEEKING GOOD INVESTMENTS

To take stock in a Loan & Trust Company now being organized in Sheffield, Ala. Address

SAM KELLER,
Sheffield, Alabama.

Canning Machinery

Complete Outfits—\$125 and upwards.

Capacity of our \$125 outfit 1,500 to 2,000 Cans per day.

A. K. ROBINS & CO., 724 E. Pratt St.
Write for further information. BALTIMORE.

Canning Factories

ESTABLISHED AND BUILT.

ALSO SUPERINTENDENTS FURNISHED

To take charge of Factories.

ADDRESS

C. PALMER MFG. CO., Blair, Nebraska.

SEATTLE

The "Queen City" and Metropolis of the New State of Washington. For Illustrated Descriptive Matter write to the Leading Real Estate and Financial Brokers, Seattle.

Crawford & Conover

Cotton Seed Oil Mills

We are making various sizes from the Planetary Mills of 5 tons to the large city mill of 50 tons per day. Our mills have all the latest modern improvements in machinery, and produce the very best results. Send for circular.

CARDWELL MACHINE CO., Richmond, Va.

FOR SALE.

Property Paying from 12 to 16 Per Cent. net per annum in the coming city of the South, Sheffield, Ala. Address

SAM KELLER,
Sheffield, Alabama.

Parties Residing here Desire to Establish a

Machine Shop,
FOUNDRY

AND

Cast Iron Pipe Works,

AND WILL CONTRIBUTE

\$50,000 FOR THAT PURPOSE.

They desire to form a connection with some Northern firm now engaged in this business who will contribute a like amount. A business of this character will pay well here. Correspondence solicited.

Address **P. O. Box 302,**
LYNCHBURG, VIRGINIA.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.

PROPOSALS.

PROPOSALS for building Water Works in Winchester, Ky., will be received until April 1st. Winchester is a town of 8,000 inhabitants. Full particulars can be obtained from F. P. Pendleton, Mayor.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until a o'clock P. M., on the 25th day of April, 1890, for all the labor and materials required for the erection and completion of the United States Postoffice building at Portsmouth, Ohio (except heating apparatus), including approaches, in strict accordance with the drawings and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time fixed for opening the same; also bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRUM, Supervising Architect. March 26th, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until a o'clock P. M. on the 25th day of April, 1890, for all the labor and materials required for certain miscellaneous repairs, and to erect and complete an observatory on roof of the U. S. Custom House building at New Orleans, La., in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time fixed for opening the same, also bids which do not comply strictly with all the requirements of this invitation. JAS. H. WINDRUM, Supervising Architect. March 29th, 1890.

ARTESIAN WELL FOR ABILENE, TEX. Sealed bids are invited for boring an Artesian Well in Abilene, Texas, to the depth of twenty-five hundred feet if required; well to be not less than six inches at the bottom. Terms of payment, which will be guaranteed, and specifications for the well will be furnished upon application in person or by letter to me. Bids will be opened and considered on the second day of June, 1890, at the office of the First National Bank, Abilene, Texas. No bid will be considered unless same is accompanied by certified check for five hundred dollars; said check to be returned to the owner if his bid is not accepted, but if his bid is accepted said check will be held until such bidder furnishes a good and sufficient bond for the faithful compliance with the terms of his bid. The right is reserved to reject any or all bids. HENRY SAYLES, Chairman Artesian Well Committee, Abilene, Taylor County, Texas.

PROPOSALS FOR TWINE.

POSTOFFICE DEPARTMENT, WASHINGTON, D. C., March 31, 1890. In addition to the proposals for twine called for by the advertisement of March 12, 1890, proposals are invited and will be received at this Department until 12 o'clock noon, of April 12, 1890, for furnishing twine made of hemp or flax, in quantities set forth in the specifications referred to in said advertisement, (Items 155 and 158.)

The right is reserved to the Department to make a selection from the different kinds called for by this and the previous advertisement.

Blanks for proposals, with specifications, will be furnished on application to the Superintendent of the Division of Postoffice Supplies, Postoffice Department, Washington, D. C.

The Postmaster General reserves the right to reject any or all bids, to waive technical defects and to accept any part of any bid and reject the other part. JOHN WANAMAKER, Postmaster General.

PROPOSALS FOR SUPPLIES FOR THE POSTOFFICE DEPARTMENT AND POSTAL SERVICE.

POSTOFFICE DEPARTMENT, WASHINGTON, D. C., March 12, 1890. SEALED PROPOSALS will be received at this Department until Saturday, the 13th of April, 1890, at 12 o'clock noon, for furnishing wrapping paper, wrapping paper for facing-slips, twine, letter scales, postmarking and rating stamps, rubber stamps, cancelling ink, pads, paper, envelopes, rubber goods, pens, pen-holders, pencils, inks, mucilage, glass goods, rulers, folders, articles of steel, rubber erasers, books, typewriter supplies, and miscellaneous stationery in such quantities of the different articles, respectively, and at such times and from time to time, as they may be ordered, during the fiscal year beginning July 1, 1890, and ending June 30, 1891, for the use of any branch of the department or postal service.

Blanks for proposals, with specifications giving detailed statement of the requirements, to be met in respect to each article, and also the estimated quantities probably to be required of each, and giving full instructions as to the manner of bidding and conditions to be observed by bidders, will be furnished on application to the Superintendent of the Division of Postoffice Supplies, Postoffice Department, Washington, D. C.

The Postmaster General reserves the right to reject any or all bids, to waive technical defects, and to accept any part of any bid and reject the other part. JOHN WANAMAKER, Postmaster General.

FOR SALE.

Foundry & Machine Shop,
PATTERNS, &c.

1 1/4 acres of ground, centrally located in city. Ready established trade. Three railroads running within 50 yards. To be sold for a division. Full particulars will be furnished to enquiring parties by writing to

MURRAY & STEVENSON,
P. O. Box 346, ANNISTON, ALA.

FOR SALE. Otto Gas Engine, 7 H.P. in best condition. L. ADLER, 221 N. Eutaw Street, Baltimore.

For Sale.**Wood-Burning Locomotives.**

Standard Gauge—15 Engines, 25 to 30 tons; one 10-ton Baldwin-Forney. 3-ft. Gauge—10 Shay patent, 8 to 18 tons; two Porter 10 and 13 ton. Other Engines, cars and rails.

A. S. MALES & CO.,
15, 16 and 17 Aetna Building, Cincinnati, O.

**Steam Fire Engines
FOR SALE.**

One Hunneman and one Button in first-class condition. Also all kinds of second-hand Engines and Boilers for sale cheap. For terms, prices, &c., address

Lowell Steam Boiler Works,

LOWELL, MASS.

Estimates given on New Work of every description.

For Sale.**BOILERS.**
41 Second-Hand and 23 New Boilers.
13 Second-Hand and 19 New
ENGINES.

At buyers' prices. Address
CASEY BOILER MFG CO Chattanooga, Tenn.

For Sale.**BOILERS.**

273 New and Second-Hand
Boilers and Engines at buyers'
prices.

CASEY & CO.

CHATTANOOGA, TENN.

FOR SALE.**JAMES MURRAY & SON.**

One 40 H. P. Horizontal Steam Engine, (second-hand). One 60 H. P. Horizontal Tubular Boiler, (second-hand). New Engines and Boilers on hand and built to order. One S. H. Steam Pump, one S. H. Steam Hammer,

PULLEYS, HANGERS & SHAFTING.
102 to 108 E. York St., Baltimore.

For Sale—Planing Mill Outfit

Complete, consisting of the following pieces:

Engine, 60 horse-power.

Boiler, 70 horse-power.

One 24-in. four-side Power "Champion" Planer.

One 14-in. four-side Power "National" Floor

Board Machine.

One 44-in. Power Re-Saw.

One 7-in. H. B. Smith Outside Moulder.

One Self-Feed Power Saw Bench.

One Wood Frame Saw Bench.

One Swinging Cut-off Saw.

One Emery Stand with wheels.

One 45-in. Basin Blower with exhaust pipes complete, together with all shafting, pulleys, belting, bits and tools.

All in perfect order and nearly new, having been run but one year. North Carolina boards or scantling will be taken in payment if desired. Address

SNOWDEN & ATLEE,

906 Richmond St., Philadelphia, Pa.

SECOND-HAND MACHINERY.

1 Iron Planer, planes to feet long, 52x48 in.

1 " " " 5 feet. 25x24 in. and other sizes also.

1 Engine Lathe, 15 feet bed, 25 inch swing.

1 " " 13 " 21 "

1 " " 12 " 20 "

1 " " 11 " 19 "

1 " " 8 " 15 "

1 " 8 ft. bed, 20 in. swing, N.Y.S. E. Co., make, and various other sizes.

20 inch Plain Drilling Machine.

1 25 in. Boring Mill.

2 15 in. Crank Shaping Machines, Al order.

1 6½ in. Slotted, automatic feed.

1 Pratt & Whitney Lincoln Millers.

1 Pond Index Miller.

1 No. 5 Stiles & Parker Press, Al.

Send for list Second-hand tools.

NEW YORK MACHINERY DEPOT,

Brooklyn Bridge Store, 16, New York

BARGAINS.

Second-Hand Machinery. Good Condition.

L. F. SEYFERT.

No. 437, 439, 441 N. 3d St., PHILADELPHIA, PA.

1 25 H. P. Lidgewood Hoist'g Eng., cyl. 10x12 in.

6, 8, 10, 15 and 20 H. P. Portable Hoisting Engines, single & double cyl. & drum. Comb'd & single.

1 15 H. P. Agricultural Eng. & Boiler on wheels.

1 6 H. P. Frick Combined Engine and Boiler.

15, 20, 40, 50 & 80 H. P. Southwark Aut. H. S. Eng's

1 6 H. P. Baxter Engine and Boiler.

1 25 H. P. Locomotive Boiler, (go) 3 in. tubes.

2 25 H. P. R. T. Boilers, 42" x 10" (28) 3 in. tubes.

1 18 H. P. R. T. Boiler, 36" x 10" (26) 3 in. tubes.

50 Upright Tub. St'l Boil'. New. 4-40 H.P. Cheap

1 Ferris & Miles Steam Hammer.

2 Light Trip Hammers.

2 Pittsburgh Eng. Lathes, 15" x 6".

1 New Haven Planer, 20" x 10" x 3".

1 H. B. Smith 4-sided 4 in. Horizontal Moulders.

1 26 in. Single Surfer, double belted G. & W.

PLEASE WRITE FOR PRICES.

For Sale.**Bargains in Machine Tools.**

We have the following Machine Tools, taken mainly in exchange for those of our own manufacture. We will sell them low.

LATHES.

1 9-in. x 2 ft. P. & W. Bench Hand Lathes. G. Order.

1 10 in. x 3 ft. P. & W. Bench Hand Lathe. "

1 10 in. x 6 ft. 6 in. P. & W. Bench Turret Lathe. "

1 12" x 14" Putman Lathe. Good Order.

1 12½" Star Hand Lathe. New.

1 15" W. & L. Pratt & Whitney Lathe. New.

1 18" Lathe, Fair Order.

1 18½" Star Toti Co. Lathe. Good Order.

1 20" Conway Lathe. Good Order.

1 20" L. W. Pond Lathe. Good Order.

1 20" Ames Lathe. Good Order.

1 20" Engle Lathe. Good Order.

1 20" Engle Lathe. Good Order.

1 20" Harris Lathe. Fair Order.

1 22" Wolcott Lathe. Fair Order.

1 24" Currie Lathe. Fair Order.

1 24" Lathe. Fair Order.

1 26" Stev. ne Pulley Lathe. Fair Order.

1 26" x 20 in. Lathe. Fair Order.

1 28" Lathe. Fair Order.

1 30" W. & L. Pratt & Whitney Lathe. New.

1 30" Lathe. Fair Order.

1 32" Lathe. Fair Order.

1 34" Lathe. Fair Order.

1 36" Lathe. Fair Order.

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1 230" Lathe. Fair Order.

1 232" Lathe. Fair Order.

1 2

TRADE NOTES.

THE MANUFACTURERS' RECORD is informed that the Cleveland Twist Drill Co., of Cleveland, O., have just turned out one spiral profiling cutter, 17 inches long, 5 inches in diameter, with a 2-inch hole. This cutter was made from the solid, and is a perfect tool in every respect without flaw or blemish. It weighed 102 pounds in the rough. This is believed to be the largest solid cutter that has ever been attempted.

WOODWORKERS demand machinery for rapid and perfect production. They are then enabled to get their work out faster and in larger quantities. The latest improved time and labor-saving machines of the Egan Co., of Cincinnati, Ohio, as described in their new illustrated catalogue (soon to appear), will supply this demand. It will contain cuts and descriptions of one of the largest lines of improved wood-working machines in the United States.

THE Acme Machinery Co., of Cleveland O., send out a handy catalogue of their bolt cutters, bolt headers, nut tappers, and other special machinery. This company has 28,000 square feet of floor area devoted exclusively to the manufacture of its specialties, and employs every modern and approved device necessary to build a first-class machine. In this catalogue each machine in turn is described in detail and illustrated. Machinists and others will find a great deal to interest them in the nearly 100 pages of this hand-book.

WHEN a paper starts out in a modest way and gradually but surely increases its scope and field and adds one room after another to its quarters, that paper has found for itself justification for its existence. The MANUFACTURERS' RECORD knows how it is itself. It started in one room, and now occupies nearly a whole building; hence it is in condition to extend congratulations to the Mississippi Valley Lumberman, of Minneapolis, which has just moved into much more commodious quarters, and in every way enlarged its facilities for increased usefulness. The Lumberman has proved itself a valuable journal and well earned the success it has attained.

THE Valley Iron Works, Williamsport, Pa., are at work on an order for engines to be used in Tokio, Japan; also one for Bombay, Calabia Causeway, India. This speaks volumes for the Valley engines, as we are informed the orders came direct, and not, as usual, through export houses. They are also furnishing the engine for the Chattanooga Stave Works, as well as for the mills of Chas. F. Camp, Carter's Depot, Tenn., and Andrew Hero, Thibadeaux, La. The engines made by this company are rapidly acquiring a world-wide reputation. They build, it is said, the largest center draft automatic engine in the United States, one of which was recently placed in the clay works of Montague & Co., Chattanooga, Tenn.

L. F. SEYFERT, corner Third and Willow streets, Philadelphia, has just issued his 1890 factory price-list and illustrated catalogue of stationary, marine and hoisting engines, vertical, horizontal and locomotive boilers, new and second-hand iron and woodworking machinery, together with pulleys, hangers, shafting and belting. Mr. Seyfert has many designs of engines made to suit specific needs and conditions in addition to standard ones, and is always prepared to make any kind of engine to order. He has recently enlarged his factory and added new and special machinery, and can fill orders at very short notice. With such a variety of engines and machines as Mr. Seyfert manufactures or supplies, his catalogue is an instructive guide to all interested in such matters.

PALMER, CUNNINGHAM & Co., of 607 Market street, Philadelphia, send out a neat handbook of their specialties in tools and supplies for machinists, pattern-makers, model-makers, jewelers, carpenters, blacksmiths, wheelwrights, coach and wagon builders, factories and mills of all kinds, and for railroads. Almost any machine or appliance needed can be supplied. Prices quoted upon application.

AMONG the orders received during the past week by the Lloyd Booth Co., proprietors the Falcon Foundry & Machine Works, of Youngstown, Ohio, are one 2½-inch three-high puddle mill; one three-high 12-inch bar mill; one rotary squeezer, with gearing; one roll lathe; one rail shear; one muck shear; one bar shear and one hot saw, for the Anniston Rolling Mill Co., Anniston, Ala.; rolls from Kentucky; one No. 2 lever shear from the Pullman Palace Car Co., Pullman, Ill.; one No. 3 lever shear for the Roanoke Rolling Mill Co., Roanoke, Va. They have at present under construction six shears, three rotary squeezers, besides large amount of miscellaneous work for their customers. They will have the addition to their foundry in operation the coming week, which will enable them to fill orders more promptly. They will be equipped with one of W. H. Thompson's 30-ton all iron steam cranes. They have also made improvements in their brass foundry and invite trade from those in that line desiring an extra quality of brass and bronze castings.

A FINE CATALOGUE.—The Niagara Stamping & Tool Co., of Buffalo, N. Y., issue a most complete catalogue of their numerous products. Instead of being published in sections as formerly, it is now all in one pasteboard bound volume of 376 pages. The catalogue is for convenience divided into three parts. Part one is devoted to tinner's tools and machines, power shears and wire-working machinery. Part two relates to power presses, foot presses, special machinery and dies of all kinds. Part three is devoted entirely to canning machinery and estimates for canning outfits. It is surprising that any one concern can handle the innumerable tools and machines of all sizes and kinds described in this catalogue. Yet no words or space are wasted. The catalogue is compact, concise and business-like. It is filled with illustrations. The part devoted to canning is especially complete and instructive. Such a complete publication of necessity has an index. There is hardly a manufacturing establishment of any sort that would not find such a catalogue as this of great value for reference before making purchases.



**SECTIONAL
INSULATED AIR
COVERINGS**

For PIPES, BOILERS, DRUMS and all other hot or cold surfaces. ASBESTOS CEMENT, PACKING, SHRATHING, &c.

SHIELDS & BROWN CO.

148 Worth St., NEW YORK.

240 and 242 Randolph St., CHICAGO.



Improved Screw Cutting
FOOT AND POWER LATHES

Drill Presses, Shapers, Band, Circular and Scroll Saws, Machinists' Tools and Supplies. Lathes on trial. Catalogue mailed on application.

THE SEBASTIAN-MAY CO.

182 West Second St., CINCINNATI, O.

Menasha Hard Wood Pulleys.

We are sole makers of hardwood bent rim, oak spoke arm Pulleys; gripped to shaft with bolts, and using patent paper bushings. They can be put onto shaft without taking it down or cutting keyseats. No glue or nails used in their construction. Hub with bushing fits any size of shaft.

Also sole makers of only small Split Pulley 1 inch to 8 inches in diameter, in the market. See above cuts of them. No glue or nails in them. No Keyseats to cut. Also sole makers of only Split Loose Pulley in the market, with gun metal mettalic bushing. Send for circulars and discounts of Menasha Pulleys.

MENASHA WOOD SPLIT PULLEY CO., Menasha, Wis.

Branch Houses: Hoen & Von Kappf, Baltimore, Md.; Lodge & Davis Mach. Tool Co., New York City; H. N. Bates & Co., Boston; Chas. A. Turner, Pittsburgh, Pa.; Greene & Wood Mfg. Co., Philadelphia; W. D. Allen & Co., Chicago and Minneapolis; E. L. Cole, New Orleans, La.; Thos. J. Bell & Co., Cincinnati; L. M. Rumsey Mfg. Co., St. Louis.

The Acme Dry-Steam Blower

FOR ROLLING MILLS.

THE GREATEST INVENTION OF THE AGE.

McCoy Patent, January 14, 1890.

IRON MANUFACTURERS MAY WELL REJOICE OVER THIS GREAT DISCOVERY.

Twenty-five per cent. of coal actually saved, quality of the iron greatly improved, grate bars preserved for years, reduces clinkers and prevents them from adhering to brickwork, thereby making an enormous saving in firebricks and labor. Ten heats can be turned out in 12 hours, owing to the great condensed heat diffused throughout the entire furnace. It can be used whenever a forced blast is required and is especially applicable to

HORIZONTAL TUBULAR BOILERS.

FOR FURTHER PARTICULARS ADDRESS

THOS. FAHY, 248 BROAD STREET, ROME, GA.

JESSE W. STARR,

Contractor & Builder **Water and Gas Works,**

—OF—
CAPITAL OBTAINED FOR RAILROAD and OTHER ENTERPRISES.

418 Walnut St., Rooms 67 and 68,

Specifications and Estimates furnished.

PHILADELPHIA, PA.

WM. SIMPKIN & HILLYER, ENGINEERS and CONTRACTORS RICHMOND, VA.

E. G. HILLYER, M. E.

Manufacturers of and Agents for Steam Engines, Boilers, Pumps and Heavy Machinery. Economical Steam Plants, Rope and Belt Driving. Special Machinery for Chemical and Fertilizing Works, Gas, Water and Creosote Works. A specialty of the "Warwick" Pole Road Locomotive, "Warwick" Tram Road Locomotive, and the "Warwick" Silent Steam Street Motor. Castings furnished. Repair work solicited. Consultations, Arbitrations and Valuations.

Engines indicated. Plans, Specifications and Estimates prepared. Correspondence invited.

WORKS—Newport News, Va. GENERAL OFFICE—1105 Main St., Richmond, Va.

SEND ALL REPAIRS TO OUR WORKS.

HERMANN SCHMIDT, President.

E. A. CATLIN, Secretary and Treasurer.

W. SIMPKIN, Vice-President and Gen. Agent.

THE RICHMOND ICE-MACHINE CO.

Manufacturers of the Most Improved

Ice-Making and Refrigerating Machinery

ON THE COMPRESSION PLAN.

We guarantee the proper working of our machinery. All working parts built to gauge, so they can be readily duplicated, and nothing but the very best material used. Specifications and estimates furnished. Correspondence solicited.

P. O. Box 315.

GENERAL OFFICE 1105 MAIN STREET, RICHMOND, VA.

Send for our Pamphlet "How to Make an Ice Factory Pay."

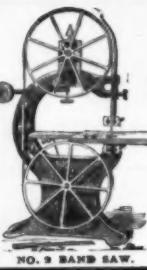
CORDES MAN, MEYER & CO.

171 & 173 W. SECOND STREET, CINCINNATI, OHIO.

**Wood-Working Machinery
OF EVERY DESCRIPTION.**

Planing Mills, Furniture and Chair Factories, Carriage, Wagon and Agricultural Works.

Write for our latest catalogue and price-list. Correspondence solicited.

**Our Improved Sweepstakes PLANER, Matcher and Moulder**

Is Simple, Strong and Durable. Never fails in Yellow Pine or Hard Lumber.

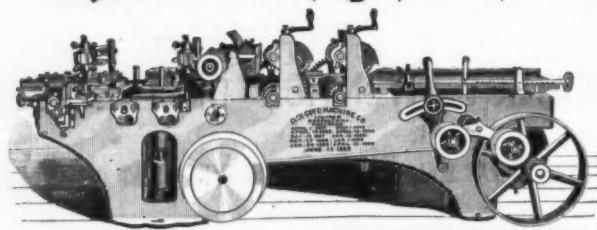
Recent improvements make it the most complete Planer, Matcher and Moulder in the market for the money, which is attested by daily testimonials. No other Planer and Matcher machine in the market has such a heavy Three-Part Journal boxes. It has an extra Head and Arbor for making Mouldings and all odd work. Two Belts drive the Top Cylinder. All Cutter Heads are made of Cast Steel. All Expansion Links and Gears are Blued and polished. It has a Water Pump. Price \$550. Heavy counter-shaft furnished with each machine. Write for special prices; also for our 80-page catalogue, showing a full line of Sash, Door, Blind and Furniture Factory Machinery made by us. Address

ROWLEY & HERMANE, Williamsport, Pa., U. S. A.

Price: To plane with top head 24" wide, under head 20" wide & match 12 1/2" wide, wt. 3,500 lbs. \$550
" " " 24" " and match 12 1/2" wide, weight 3,000 lbs. ... 410
" " " 20" " 3 1/2" " 2,600 lbs. 360

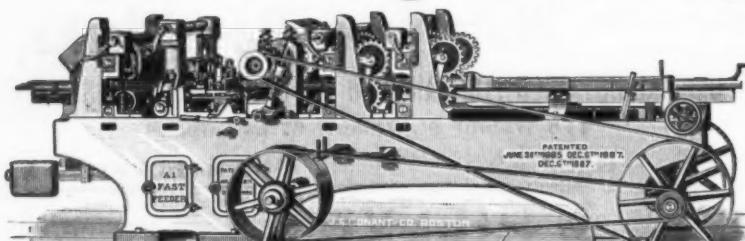
GLEN COVE MACHINE COMPANY, Limited,

MANUFACTURERS OF

Improved Planing Mill Machinery.

No. 84.—10-inch Patented Fast Feed Moulding Machine.

SPECIALTIES: Fast-Feed Sizing, Planing and Matching, Flooring and Ceiling, Inside Moulding and Double Surfacing Machines; also the celebrated GLEN COVE DOUBLE DECKER and GLEN COVE SPECIAL.

**S. A. WOODS MACHINE CO.
Wood-Working Machinery,**

Planing and Moulding Machines a Specialty

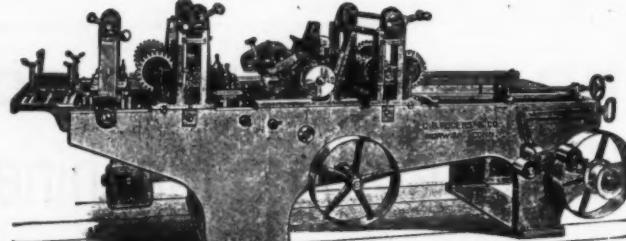
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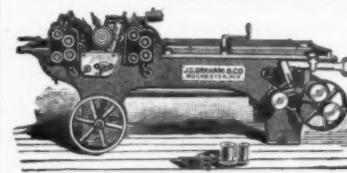
Office and Works, Norwich, Conn. Wareroom, 109 Liberty Street, N. Y.

THOS. K. CAREY & BROS., AGENTS, BALTIMORE, MD.

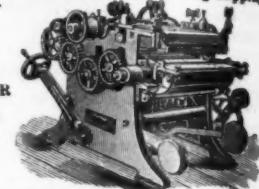
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Manufacturers of Planers and Matchers, Surfaces, Timber Planers, Resawing Machines, Gang Rippling Machines, Self-Feed Saw Tables, Moulders, Pony Planers, Etc.



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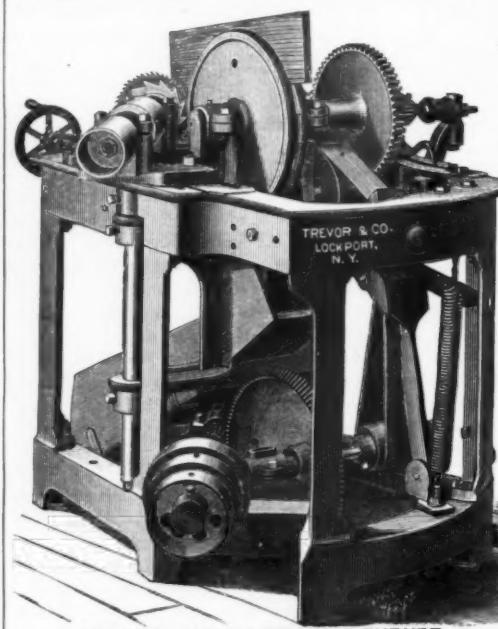
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Machinery
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Shing'e and Heading
SAWS.**

Heading Sawing Machines,
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Veneer Cutting Machines,
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Lathes for turning Handles
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If you want Machinery &
Staves, Heading, Shingles or
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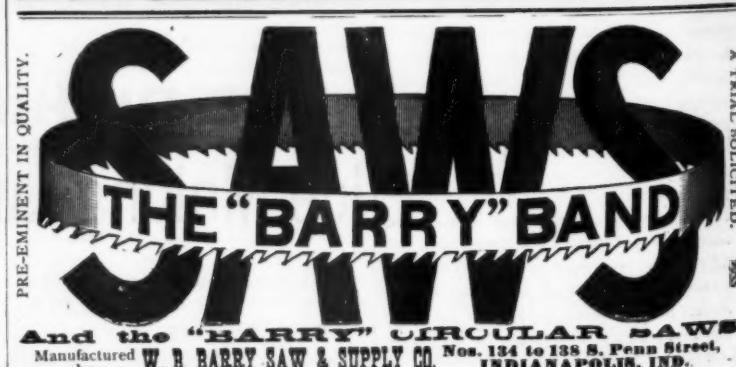
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MACHINE.****The EUREKA**
For Smoothing Sash, Doors, Blinds
and all Plain Surface of Wood.

The bed is movable endways, and quickly adjusted to any thickness. The revolving head carrying the sandpaper is easily swung across the surface, and the pressure is regulated at the will of the operator. For Circulars address

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And the "BARRY" CIRCULAR SAWS
Manufactured by W. B. BARRY SAW & SUPPLY CO. Nos. 134 to 138 S. Penn Street, INDIANAPOLIS, IND.



No. 5½—Pacific Planer and Matcher.



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For Planing Mills, Sash, Door and Blind Shops, Furniture, Carriage and Wagon Factories,
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Band Saw.

Awarded "GRAND PRIX" at the Great PARIS EXPOSITION of 1889.

Every Machine Tested and Warranted.
Send for Circulars and Estimates.**Wood Working
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COMPLETE OUTFITS FOR PLANING MILLS

H. B. SMITH MACHINE CO.Send for catalogue and visit our extensive
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Established 1840. **HENRY DISSTON & SONS,** Established 1840.

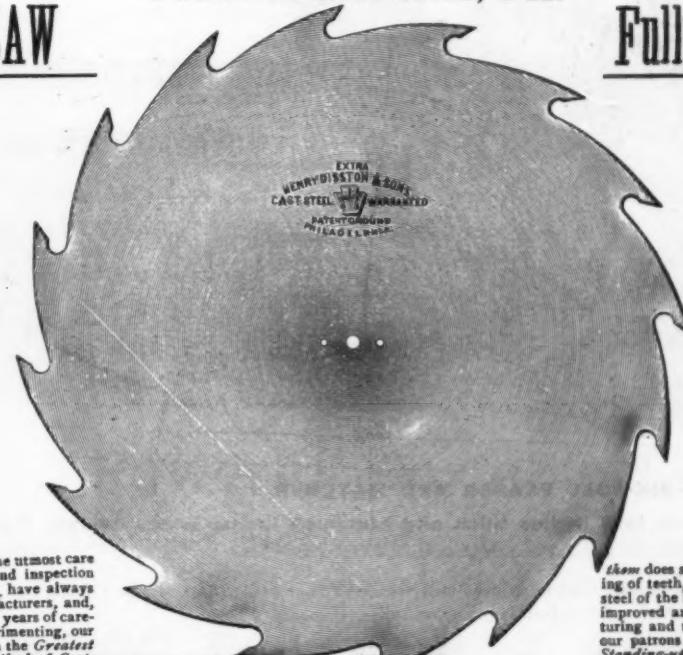
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of our steel and saws, have always
headed the list of saw manufacturers, and,
we are happy to say, that after years of careful
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efforts have been crowned with the Greatest
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SHAFTING, PULLEYS AND HANGERS.

**HAVE NEVER BEEN EQUALLED.**

Saw does away with the splitting and spalling
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improved and patented process of manufac-
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our patrons with saws that for *Toughness,*
*Standing-up Quality, Uniformity of Tem-
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SEND FOR A CATALOGUE AND SPECIAL LOW PRICES.

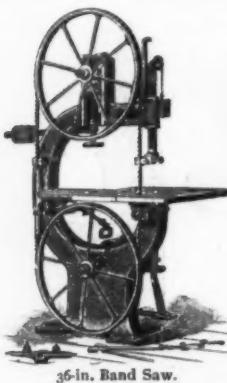


COMPLETE OUTFITS

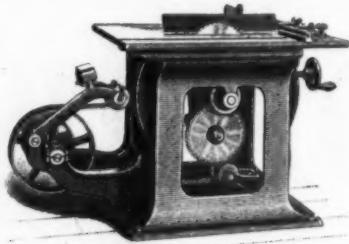
For Planing Mills, Sash, Door and Blind Factories,
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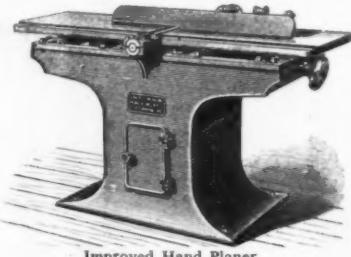
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36-in. Band Saw.



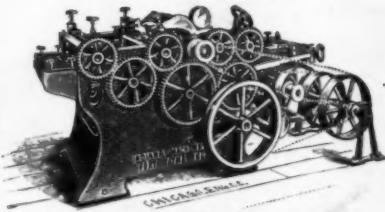
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Improved Hand Planer.



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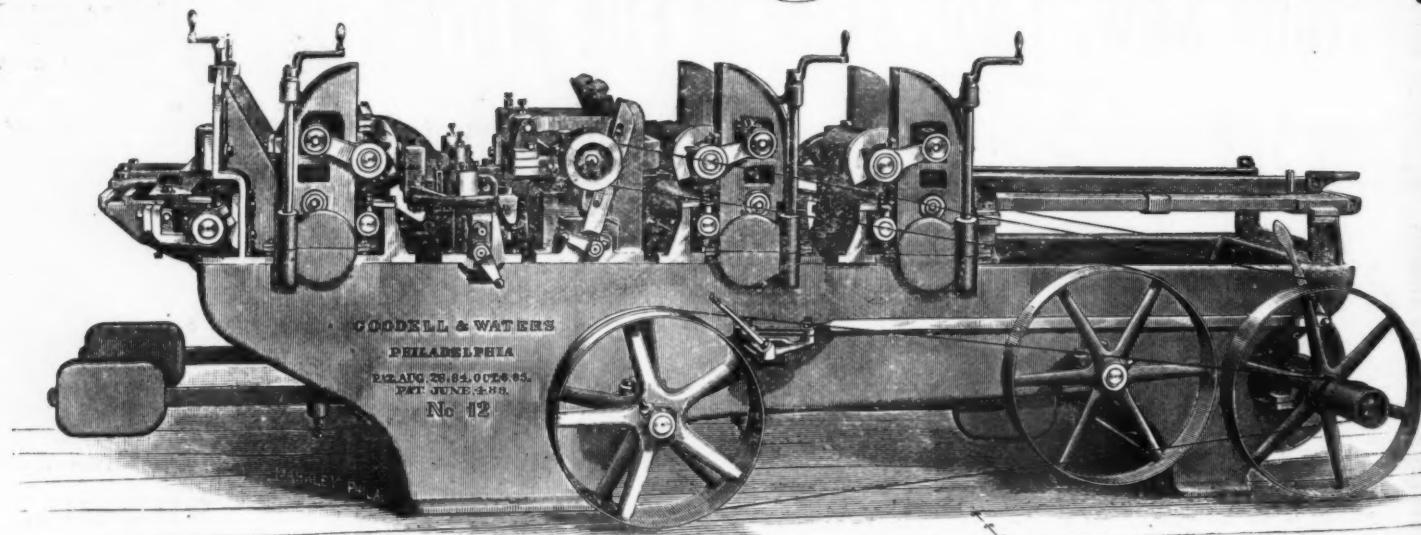
WOOD-WORKING MACHINERY.

—Descriptive Circulars and Estimates Cheerfully Furnished.—

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No. 12 SIX-ROLL PLANER AND MATCHER.

To Double or Single Surface 24 inches wide up to 6 inches thick and match 19 inches wide. Weight 7,000 pounds.

Our line of Planing Mill Machinery is very complete. During the past year we have introduced many new and improved tools, and you will do well to consult our catalogue. Estimates cheerfully given for complete mill outfits.

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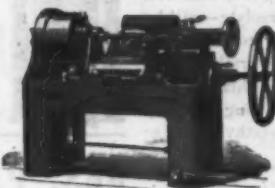
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HUB, SPOKE, WHEEL, BENDING

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Patent Plow-Handle Benders, Shapers, Cut-off Saw and Revolving Polishers, Hot-Form, Double and Single Bent Pole and Express Shaft Benders, Neck-Yoke, Singletree, Brush Handle Lathes and Finishing Machines. Estimates and Circulars given upon application.

COMPLETE OUTFITS
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Patent Automatic Double-Chisel Hub-Mortising Machine. Built in three sizes.

Established
1853.**Wheeler, Madden & Clemson Mfg. Co., Middletown, N.Y.**

Manufacturers of Hand, Cross-Cut and Wood

No. 24 Hand, Panel and Rip Saws—26 inch, list \$20.00 per dozen.



PRICE, QUALITY and general SUPERIORITY taken into consideration, this is the Best Hand Saw on the market for Mechanics use.

SAWS.

Extra Thin Back. Patent Handle. Hollow Back Blade.

PERFECT TEMPER. ELEGANT FINISH. SUPERIOR FILING.

CROSS-CUTS furnished in all the leading shapes, sizes and styles of teeth, in both WIDE, NARROW and ONE MAN Saws. Only the very best of Crucible Steel of our own manufacture enters into our goods, and we fully warrant them in each and every particular. We are now turning out the finest goods ever produced in our line. For Sale by all Leading Jobbers and Dealers.

EXAMINE! READ!**Terms Easy and to Suit Buyers.**

THE AKRON IMPROVED

DRY KILN.

More Practical, Economical and Efficient than any other.

RESULTS GUARANTEED.

LOW PRICES.

MANUFACTURED BY

The Akron Heating & Ventilating Co.

117 CHURCH STREET,

AKRON, OHIO.

Established 1874.

MAUFACTURERS OF
Taper Shank Drills,
Straight Shank Drills,
Blacksmith Drills,
Bitstock Drills,
Straight Fluted Drills,
Machine Bit Drills**Cleveland Twist Drill Co.**

Send for Catalogue.

OFFICES—{ Cor. of Lake & Kirtland Sts., Cleveland, O. } Write for Discounts.
MORTON, REED & CO., BALTIMORE.MANUFACTURERS OF
Self-feeding Reamers,
Expanding Reamers,
Shell Reamers,
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Taper Reamers**Defiance Oil Fuel Burner & Forge Company.**

This Company offers to Iron and Steel Manufacturers their system of burning Crude Petroleum, which they warrant superior to any on the market. We put it in on trial on its merits. The cost is one-third less than the cheapest. For particulars apply to office,

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**THE "WELLS LIGHT."**

WALLWORK & WELLS' PATENTS. (Registered Title.)

Powerful Portable Light ^{UP} TO 2,000 C. P.

Self Contained. No Outside Motive Used. Complete in Itself, as shown by Accompanying Cut. Simple in Construction. Any Laborer can handle it.

3,000 SOLD LAST SEASON.

UNAFFECTED BY WEATHER.

KEEGAN & HALPIN,44 & 46 Washington St.,
NEW YORK.FOR FULL INFORMATION
APPLY TO

TRADE NOTES.

THE nickel-plated dauber and mud scraper—an article which every man who blacks his shoes will appreciate—will be found advertised in another column by its manufacturers, the Empire Portable Forge Co., Lansingburg, N. Y. This is a neat and durable dauber, and being made by practical brush-makers, is worthy of attention.

THE Bessemer Journal issues what it calls a Spring Edition in its issue of April 3, descriptive of the promising town of Bessemer, its industries and resources. Illustrations are given of the various factories and of leading business blocks, together with portraits of leading men. This issue is very creditable, but no more than would be expected from such a live town as Bessemer.

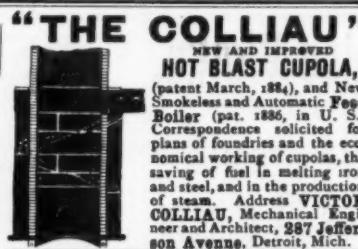
ROBINSON & ORR, investment bankers and dealers in iron and steel at Pittsburgh, Pa., whose advertisement will be found in another column, have recently removed to new quarters at 419 Wood street. This firm has had over 30 years' experience in the iron and steel trade, and has recently added the investment department to its other business. This department will make a specialty of bonds, mortgages and local securities, and iron mining stocks of recognized value.

A TRACT of 30,000 acres of fine coal, iron and timber land, situated in the neighborhood of recent great development in Tennessee, in the vicinity of Harriman, Cardiff and Rockwood, is offered for sale in our advertising columns by L. L. Thomasson, Chattanooga, Tenn. On the land there is said to be a remarkable town-site, and an abundance of limestone is at hand. The property adjoins the Queen & Crescent System. The veins of coal are said to range from 22 inches to 6 feet in thickness. The iron is red fossiliferous.

A CIRCULAR is at hand from Ryan & McDonald, manufacturers of contractors' supplies and mining machinery, whose office and works are at Waterloo, N. Y., but with a branch office in Baltimore at 11 South street. Among the manufactures of this firm are steam-shovel cars, horse dump cars, logging cars, mining cars, push cars, flat cars, quarry cars, brick-yard cars, derrick fittings, derrick winches, hoisting drums, hoisting engines, light locomotives, hoisting machinery, boilers, engines and other valuable labor-saving devices.

THE 1890 catalogue of the tile and brick machines manufactured by the Anderson Foundry & Machine Works, at Anderson, Ind., is at hand. This company also manufacture steam boilers and engines, both portable and stationary, circular saw mills, both portable and stationary, and a variety of iron and brass goods, besides trucks and other accessories to brick-yards. This catalogue describes and illustrates the brick and tile machine, and hosts of testimonials are given to show the high regard in which the machines of this company are held. Copies of the catalogue can be had upon application to the company.

THE Buffalo Forge Co., of Buffalo, N. Y., has closed a contract with the South Superior Improvement Co., of Duluth, Minn., for heating apparatus for the wagon factory. The hot blast system, employing immense fans for the distribution of heated air, has been adopted. The dry-kilns will be heated by the same system also. The blacksmith shop will be furnished with a complete system of forge blowers and smoke exhaust, by which means the gas and smoke, which will naturally accumulate, will be driven through an outlet. The woodworking machinery will be connected by piping direct with the furnaces.



JAS. P. WITHEROW.
ENGINEER & CONTRACTOR,
Furnace & Steel
Plant Construction.

PITTSBURGH, U. S. A.

Blast Furnaces and Steel Works designed and erected complete in every detail ready for operation. Special attention given to the manufacture of

* HEINE *
Safety Water Tube Boilers.

Owning an extensive manufacturing plant, I can guarantee promptness in execution, and satisfaction in any contracts undertaken by me.

Gordon, Strobel & Laureau,
(LIMITED),
ENGINEERS AND CONSTRUCTORS,
PHILADELPHIA, PA.
Blast Furnaces, x
x Steel Plants,
Fire-Brick Stoves, x
x Blowing Engines.

We are sole manufacturers of the GORDON-WHITWELL-COWPER FIRE-BRICK HOT-BLAST STOVE, and within four years have introduced them as follows:

Jefferson Iron Works, Ohio.....	4
North Chicago Rolling Mill Co., Ill.....	3
Joliet Iron & Steel Co., Ill.....	4
Missouri Furnace Co., Mo.....	2
Younger Furnace Co., Mo.....	3
Western Steel Co., Mo.....	2
Tenn. Coal Iron & R. R. Co., Ala.....	18
Cheviot Rolling Mill Co., Ohio.....	4
Belmont Nail Co., W. Va.....	3
Sloss Iron & Steel Co., Ala.....	1
Ala. & Tenn. Coal & Iron Co., Ala.....	9
Nashville Iron, Steel & Charcoal Co., Tenn.....	4
Decatur Land, Iron & Furnace Co., Ala.....	2
N. Y. & Ferry Coal & Iron Co., Ohio.....	2
*Irondale Furnace, W. Va.....	2
Cornwall Anthracite Furnaces, Pa.....	4
Duluth Iron & Steel Co., Minn.....	3
Reading Iron Co., Pa.....	3
Total	85

Batts Patent Differential Hoist.

MANUFACTURED BY THE

Boston & Lockport Block Co.

162 Commercial St.
BOSTON.
The chief merits of this hoist that we wish to bring to the public notice is that it only requires
ONE MAN TO HOIST THE LOAD.
It is also far more compact, taking up less room than any other make, and will hold the load at any point.
Send for circular and prices.
Every hoist warranted.



THE IMPROVED LANCASTER

Turbine Wheel.

Write for Descriptive Catalogue.



Lancaster Turbine Wheel Co. Lancaster, Pa.

FOR
Ice-Making & Refrigerating
MACHINERY,

ADDRESS THE
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HUGHES STEAM PUMP CO.
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MANUFACTURERS OF
Single, Duplex and Compound Pumps
FOR ALL DUTIES.
WATER WORKS PUMPING ENGINES
SEND FOR CATALOGUES AND PRICE LISTS,
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BONE MILLS.

F. WILSON,
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WILSON BROS. EASTON, PA.
Also Manufacture
Portab'e & Stationary Engines
AND BOILERS.

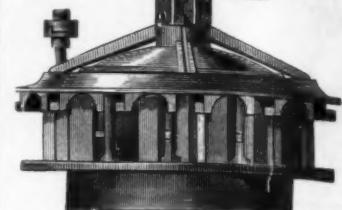
Grist and Flouring Mill Machinery.

The Balanced Gate Turbine.

PAT. SEPT. 3, 1888.
High Percentage,
Great Simplicity,
CLOSE FITTING,
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EASY WORKING GATE
Under all Circumstances.
Sold under Full Guarantee at Low Prices.

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SUCCESS
Water Wheel.



This Wheel is strong and durable. Exceeded all other wheels in the great trial tests. Is in use all over the nation. I also make a specialty of
HEAVY GEARING & MACHINERY
For Paper, Cotton and Grist Mills.

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IMPROVED TURBINE
WATER WHEELS.
MOUNT HOLLY, N.J.

Rome Foundry & Machine Works,
ROME, GA.

Manufacturers of the well known

DAVIS DOUBLE TURBINE

Water Wheel



Beyond all question one of the best Wheels on the market, and is fully guaranteed.

Send for Illustrated Catalogue and Price-List.

Portab'e & Stationary Engines
AND BOILERS.

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The GREAT IMPROVEMENT IN
ROOFING.

We are now ready to supply the product of entirely new machinery and processes just completed by which we not only have greatly improved the strength and durability of our well-known ASBESTOS ROOFING, but have also secured a degree of uniformity never before attained in any similar fabric. We offer this as the PERFECTED form of the portable Roofing which we have manufactured with continued improvements during the past thirty years, and as the most desirable Roofing for general purposes.

The principal features of our recent improvements, for which patents have been allowed in this country and in Europe, are described in our new circular, which, with samples, will be sent free by mail.

Our Asbestos Roofing is now in use upon Factories, Foundries, Cotton Gins, Railroad Bridges, Cars, Steam-boats, etc., in all parts of the world.

It is supplied ready for use, in rolls of 200 square feet, and weighs with Asbestos Roof Coating, ready for shipment, about 80 pounds to 100 square feet.

It is adapted for steep or flat roofs in all climates, and can be readily applied by unskilled workmen.

There are inferior imitations of our Asbestos Roofing; purchasers are cautioned.

Samples and Descriptive Price List free by mail.

H. W. JOHNS MANUFACTURING COMPANY,

SOLE MANUFACTURERS OF

H. W. Johns' Liquid Paints,
Fire-Proof Paints, Building Felt,
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Vulcanized Moulded Rings, Washers, etc.

87 MAIDEN LANE NEW YORK.

Until you have seen our circulars, Engines coming from 5 to 110 horse power, both Vertical and Horizontal, at prices below those of other reputable makers. 1600 in use. Boilers of every style. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Draining or Irrigation. Established 22 years. Perfect satisfaction guaranteed. Ask for Circular and address

Morris Machine Works,
BALDWINSVILLE, N. Y.

FOR SALE

For a short time only,

30,000 ACRES

Of the Finest

Coal & Iron Property

IN THE SOUTH.

TIMBER AND LIMESTONE ABUNDANT.

40 Miles North of Chattanooga on Cincinnati Southern Railway.

BEAUTIFUL TOWN SITE.

Rare Chance for Capitalist or Syndicate.

Correspondents wanted. Address at once

L. L. THOMASSON,
CHATTANOOGA, TENN.**J. A. HOOVER,**
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Lands bought and sold on commission.

R. K. WRIGHT, JR.**Real Estate and Insurance**

GRAHAM, Tazewell Co., VA.

REPRESENTING

Graham Land & Improvement
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NORTH CAROLINA.

This pleasant and growing city invites enterprising citizens and capitalists from all parts of the civilized world.

\$150,000 Freedom from Municipal Taxation. \$150,000
Splendid Opening for Men of Push and Energy.

The City of Wilmington has made an appropriation of \$150,000 for the purpose of encouraging manufacturing.

ADVANTAGES OFFERED.
Climate favors work the entire year.
Labor abundant and cheap, living economical.
Freight rates are low by rail to interior points.
Shipping rates by steamships and vessels low to all parts of the world.**NO BETTER POINT FOR PROFITABLE INVESTMENT.**
We have the raw material in abundance.**Facts About Wilmington.**

A seaport city of 25,000 population. An important naval port, cotton and lumber market. Extensive shipping interests. A secure, fresh water harbor. Depth of water on bar 18 feet at mean high water; under government supervision, being continually deepened.

Excellent terminal facilities. Four railroads in operation, two in process of construction. Surrounded by attractive summer resorts. Adjacent territory especially adapted to trucking, peach growing, vineyards and rice culture. Drainage excellent.

Health and climate unsurpassed. An all-the-year-round resort—"THE LONG BRANCH OF THE SOUTH."

Excellent schools and churches of all denominations. A cordial welcome extended to all good citizens and men of push and intelligence.

Three banks, with ample banking facilities. Among the manufacturing enterprises now in operation are numbered: Cotton, Pine Fibre Fertilizer, Wood Working and Ice Factories, Rice, Flour and Planing Mills; Foundry, Machine Shops, Gas, Electric Light Plants, Cotton Compress, Creosoted Lumber, Car and Water Works.

We invite all to come and see, and on the spot to judge for themselves. Wilmington offers excellent hotel accommodations, and a committee of its Chamber of Industry will extend to strangers seeking home and investment cordial greeting and attention.

Persons who may desire fuller information can obtain it by addressing

The Chamber of Industry, Wilmington, N. C.

CAMDEN,The Capital of Kershaw County,
South Carolina.

This ancient and historic town is noted for its dry atmosphere, pure water, beautiful scenery, healthful climate and refined society.

It is the center of a rich agricultural country, which contains great natural resources. Hardwoods of many species are abundant, and great forests of long leaf pine, which impregnate the air with terebenthine odors. Several good hotels entertain travelers, and two are carefully conducted for the especial comfort of northern health and pleasure seekers.

Manufacturing of all kinds can be done here advantageously. Two railroads, the South Carolina and the Charleston, Cincinnati & Chicago, furnish transportation to all parts of the country. Two telegraph lines, the Postal and the Western Union, have offices here.

Churches and schools are numerous and well sustained.

A cotton mill company has been organized, and the first installment of twenty per cent. has been called in.

Land is cheap. The climate is salubrious, and subject to no extremes during the year.

Camden invites capitalists, manufacturers, pleasure and health seekers and sportsmen to visit the city and examine the advantages it offers to all.

All inquiries will be promptly answered by the undersigned, official representative of the intendant and warders.

DR. JOHN W. CORBETT
Or the President of the Board of Trade.GEO. T. McWHORTER, Pres't, Chickasaw, Ala.
JAS. M. ALLEN, Secretary, Waterloo, Ala.

Capital Stock \$200,000.

THE WATERLOO
Land, Mining & Mfg. Co.**WATERLOO, ALA.**
(Lauderdale Co.)

Will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of this character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals and consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be shipped from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than any other town in Alabama (Chickasaw excepted). Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the State. Present price of bark at landing \$4.50 per cord. Special factory for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.

TAX EXEMPTION**FOR**
MANUFACTURERS.*An Ordinance to abate for ten years from the 1st day of July, 1889, under certain conditions, the personal taxes on mechanical tools and implements used in manufacturing within the limits of the city of Norfolk, Va.:*

WHEREAS, the geographical situation of the City of Norfolk, its convenient and commodious harbor, the ample means of transportation tributary to it, the abundant supply of lumber, coal, iron, cotton and other materials easily accessible, and its other natural and acquired advantages, offer superior inducements to manufacturing and other business enterprises, and whereas the city is desirous of fully developing and utilizing these advantages and, to that end, of encouraging the investment of capital in, and the establishment of various manufacturing enterprises within its limits or immediate vicinity, therefore,

SEC. 1. Be it ordained by the Select and Common Councils that the Finance Committee of the Councils be, and it is hereby authorized and directed upon the application of any individual, firm or corporation, actually engaged in the business of manufacturing in the city of Norfolk, to abate any and all personal taxes which may be levied hereafter for any of the corporate uses thereof upon any mechanical tools or implements, whether worked by hand or by steam or other motive power, or upon any machinery, manufacturing apparatus or engines owned by such individual, firm or corporation, and actually employed and used in the business of manufacturing in said city; provided always, that such application for an abatement of taxes in any year shall be made before the annual levy is made by the Commissioner of the Revenue, and provided also that every application for such abatement shall be verified to the satisfaction of said Finance Committee by the oath of the party applying for the same or other satisfactory evidence, and provided further that no abatement or exemption shall be made under this ordinance until a manufacturing enterprise or business, in which shall be actually invested a capital of not less than \$25,000, and which is not at present established or carrying on business within the limits of the city of Norfolk, shall be established within such limits.

SEC. 3. And be it further enacted and ordained that nothing herein contained shall be construed to authorize any abatement of taxes levied upon property assessable and taxable as real estate.

SEC. 4. And be it further ordained that this abatement or exemption shall extend for the space of ten years from 1st of July, eighteen hundred and eighty-nine.

SEC. 5. This ordinance shall be in force from its passage.

Adopted as amended by the Select Council November 12, 1889.

(Signed) **FRANK MORRIS,**
President Select Council.

Adopted by the Common Council December 3d, 1889.

(Signed) **H. HODGES,**
President Common Council.A true copy.
W. W. HUNTER,
City Treasurer.**MR. W. P. RICE,**

so widely known as the promoter of the town developments at Fort Payne, Ala., and Denison, Texas, has just returned from London where he arranged for a large amount of English money as the capital of the Cardiff Coal & Iron Company.

This company has bought a large area, comprising MANY THOUSAND ACRES OF COAL, IRON, TIMBER AND TOWN-SITE LANDS IN EAST TENNESSEE.

The property is adjacent to the Cincinnati Southern Railroad, about 75 miles north of Chattanooga, and near the old town of Rockwood.

The Company proposes to inaugurate a DEVELOPMENT ENTERPRISE on a scale of magnitude such as has not yet been reached in the South.

A NUMBER OF LOTS IN THE PROPOSED NEW TOWN OF

CARDIFF

WILL BE SOLD AT AUCTION ON

Tuesday, April 22d.

It will probably be more largely attended than any sale that has ever been held in the South.

Ten Special Vestibuled Trains

WILL BE RUN FROM NEW ENGLAND ALONE.

The terms and conditions of sale will be favorable to buyers.

THIS IS UNQUESTIONABLY THE MOST PROMISING OPPORTUNITY FOR REAL ESTATE INVESTMENT YET PRESENTED.

Manufacturers Attention.

BRIDGEPORT, ALA.

ON THE TENNESSEE RIVER.

Situated on a Plateau one hundred and fifty feet above high water, it commands a most Charming Panoramic View of the Valley Surrounded by Mountain Peaks.

Complete Drainage. Location Perfectly Healthy. River Navigation Open All the Year.
Perfect Wharfage. Railroad Freight Rates the same as Chattanooga's.

Look at the Profitable Investments for Manufacturers.

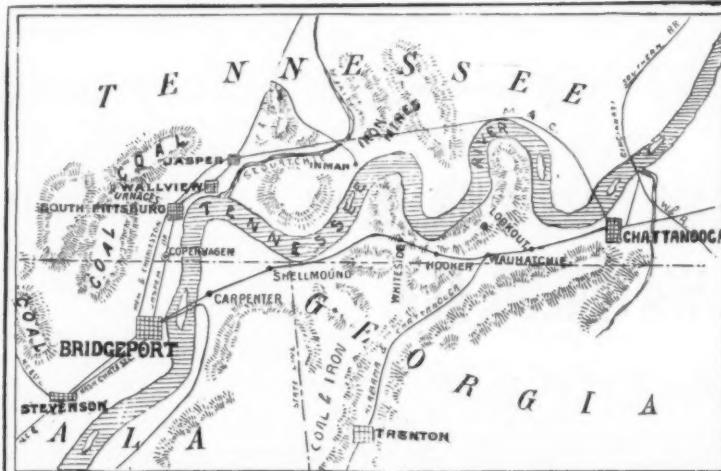
We are surrounded by Unlimited Deposits of the Best Coking Coal in the South; Mountains of Iron; over 80,000 Acres of Mineral Land belonging to this company is covered with Immense Forests of Hard and Soft Woods of the following varieties; Oak, Ash, Pine, Hickory, Poplar, Sycamore, Cedar, Elm, Gum, Red Birch, Sour Wood and Chestnut. We defy competition in variety and quantity of Timber with any section of the United States. We have Building Stone, Brick Clay, etc.

THREE RAILROADS

Now in Operation.

Three more in course of construction.

Over Fifty Trains Daily.



Six Mails Each Way Daily.

It is the Key to the
SEQUACHEE VALLEY.

Plans are now being Perfected

FOR A

\$75,000 HOTEL

OUR GRAND AUCTION SALE OF LOTS

OPEN TO THE WORLD.

TUESDAY, MAY 6.

Half-Fare Tickets to and from Nashville and Chattanooga to Bridgeport

DURING THE WEEK COMMENCING MAY 5th.

BRIDGEPORT LAND & IMPROVEMENT CO., Bridgeport, Ala.

NEW DECATUR,

* ALABAMA. *

The New Industrial City of the Great Tennessee Valley.

The Decatur Land, Improvement & Furnace Company, for the purpose of attracting the attention of people abroad to the unrivalled advantages of New Decatur as a place for investment and for the location of industrial enterprises, and in order to stimulate its growth and progress will hold an

* AUCTION SALE *

Choice Business and Residence Lots

On Monday and Tuesday, May 19 and 20, 1890.

The lots selected being scattered through the four additions already laid out, comprising part of the town of New Decatur. Arrangements are being made with the Louisville & Nashville Railroad and with the Memphis & Charleston Railroad (East Tennessee, Virginia & Georgia Railway System) for

CHEAP RAILWAY FARES TO NEW DECATUR AND RETURN

on the lines of said railways and their connections, the particulars of which will be announced at an early date. The Board of Directors of the Land Company, in furtherance of the objects of this sale as stated above, will set aside

One-Half of the Proceeds of the Sale

and expend the same from time to time in improvements, in promoting and fostering industries of all kinds and in such other ways as may be expedient and advisable for the purpose of developing the town.

The company have published a beautifully-printed and illustrated book of 63 pages, entitled:

"ON THE BANKS OF THE TENNESSEE,"

containing a map, 22 "phototype" views of New Decatur and 100 questions briefly but fully answered, giving all necessary information about Northern Alabama, the Tennessee Valley and New Decatur, with a description of the numerous and varied industries already established in New Decatur, a copy of which book will be sent free upon application.

Visitors attending the sale will see in full operation:
A 70-ton Charcoal Iron Blast Furnace.

The shops of the Lovisville & Nashville Railroad, covering 58 acres.

The shops of the United States Rolling Stock Company, covering 50 acres.

The Decatur Car Wheel Works, turning out 150 car wheels daily.

Charcoal & Chemical Works, capacity 50,000 cords of wood per annum.

The American Oak Extract Works, making tanning extract.

Besides one of the largest steam Cotton Compresses in the South, large saw mills, lumber yards, planing mills, sash, door and blind factories, metal cornice and roofing works, steam fitting and plumbing works, brickyards, an ice factory, gas and electric light plants, water works (with 30 miles of pipes already laid), five miles of street railway, a \$20,000 brick schoolhouse, a system of manufacturers' railway switch-tracks and

"THE TAVERN,"

THE FINEST HOTEL IN ALABAMA.

THE DECATUR LAND, IMPROVEMENT & FURNACE CO.

NEW DECATUR, ALA.

GLASGOW,

VIRGINIA.

The Grandest Enterprise of the New South.

THE LOCATION

is naturally fine and adapted to the construction of a large city.

THE CLIMATE

guarantees immunity against epidemics.

WATER-POWER

is practically unlimited.

IRON ORE

in abundance and of fine quality.

LIMESTONE

near at hand and plentiful.

CEMENT

extensive deposits of good quality.

GLASS SANDS

in large quantities and of high grade.

TIMBER

of various kinds and abundant.

FUEL SUPPLY

Pocahontas and New River Coke in convenient proximity.

TRANSPORTATION FACILITIES

Two trunk lines—Norfolk & Western, with its Shenandoah Valley Railroad connection, and the Chesapeake & Ohio—giving direct communication with fields of finest Coaking and Steam Coals in the country, with deep water transportation with Norfolk & Newport News, with the West via Cincinnati.

THE PITTSBURG & VIRGINIA R. R.

to be built in the near future will go through the Blue Ridge mountains at this point.

FACILITIES FOR MANUFACTURING

unexcelled by those offered by any locality in the South.

ADDRESS

ROCKBRIDGE COMPANY,

Ex-Gov. FITZHUGH LEE,

Hon. WM. A. ANDERSON,

M. M. MARTIN,

President

Vice-President.

General Manager.

BUENA VISTA.

The Most Inviting Town in Virginia as a Location for Manufacturers.

In a Magnificent Farming Country—the Famed Shenandoah Valley—Surrounded by Inexhaustible Wealth of Iron and Timber.

A Wide Diversity of Enterprise, Including FURNACE, STEEL WORKS, ROLLING MILL, PULP and PAPER MILL, TANNERY, WOOLEN MILL, WAGON WORKS, &c., &c., Already Secured.

Extracts from the Annual Report of the President and Directors, made Feb. 13, 1890:

Every development made upon your Mineral Properties has demonstrated its wonderful wealth of resources, and to-day we are able to say that you have the richest and most valuable mineral property in Virginia, and for extent, not surpassed in the South.

The fertile and extended plains, devoted eight months ago to agriculture pursuits, are now the scene of busy activity, in grading the wide streets of the town, in laying lines of pipes for its water supply, in the building of its handsome and stately business houses, and comfortable and attractive homes.

The waste lands lying along the North River are sites for extensive and valuable manufacturing enterprises, aggregating nearly a million of dollars, already secured, and many more which will be undoubtedly established during the coming year.

Your attractive and well-kept hotel has been found entirely inadequate for the accommodation of its guests, and an addition is now being made which will add about fifty rooms. Its unparalleled location affording charming views of mountain, plain and river scenery, has made it a most desirable resort, and many families expect to make it their summer home.

The valuations, which are submitted herewith, are made by competent gentlemen not connected with the Board of Directors, selected by the Buena Vista Real Estate Exchange, and the prices given are one-fourth less than those paid for lots actually sold for cash in the respective sections.

The plans for the building of the town have been taken with care, and the erection of over \$250,000 of buildings is assured within the coming twelve months, outside of what may be done by the lot owners in their individual capacity.

Whilst the revenues derived from the property might justify the payment of a large dividend upon the stock of the company, your Board of Directors submit it to your better judgment whether it is not wiser to forego a present advantage for a much larger return in the use of these earnings in the future development of the town.

Several large industrial enterprises, employing many skilled workmen, can now be secured for Buena Vista if we are enabled to subscribe liberally to the stock. The benefit to be derived from the location of such industries will ultimately far exceed any dividend which might now be declared.

It is of the first importance that a considerable sum of money be at once devoted to securing an ample supply of water and a complete system for lighting the town. With the assurance to our stockholders that the present revenue shall be devoted to these purposes, the Board of Directors have declined to declare a dividend.

The whole course of the Board in the management of the enterprise entrusted to them has been conservative, preferring to lay the foundation for real future solid worth, rather than to make present speculative values. This policy has been pursued in making the statement and the estimates now submitted to the stockholders; your Board would recommend the continuance of the same policy.

Receipts and Disbursements to Feb. 1, 1890.

AMOUNTS RECEIVED.

Received for Stock	\$297,811.38
" Interest	5,917.92
" Sale of Lots	40,890.45
" from all other sources.....	12,355.99
	\$356,975.74

AMOUNTS PAID OUT.

General expenses.....	\$ 81,069.12
Expenses of streets and water works.....	10,869.10
Paid for real estate.....	123,608.67
Loans.....	2,000.00
Stock in manufacturing enterprises.....	32,250.00
Cash in bank.....	107,178.85
	\$356,975.74

FINANCIAL CONDITION.

ASSETS.

Value of unsold lots, hotel, office, &c., within corporate limits.....	\$ 591,602.00
Bills receivable.....	65,666.05
Amount due on stock.....	82,496.36
Interest due on stock.....	4,778.42
Stock in industrial companies.....	92,500.00
Open accounts, lumber, &c.....	25,000.00
Inventory—horses, carts, tools, &c.....	1,000.00
Inventory—mining machinery, &c.....	2,145.55
Cash in bank.....	107,178.85
Value pipe line and water works.....	5,000.00
Estimated value of all mineral, agricultural and timber lands, including 1,200 acres adjoining present town site and equally suitable for town purposes.....	1,000,000.00
	\$1,977,367.23

LIABILITIES.

Capital stock issued and outstanding.....	782,200.00
Balance due on real estate 1 and 2 years....	85,000.00
Interest on same to 1st February, 1890.....	3,825.00
Due on subscription to stock in Industrial Co.	58,750.00
Due on addition to hotel and office building.	20,000.00
Surplus	1,027,592.23
	\$1,977,367.23

FOR INFORMATION ABOUT BUENA VISTA, WRITE TO

The Buena Vista Company,
BUENA VISTA, VA.

NEW ENGLAND CITY, GEORGIA.

An Excellent Location for Manufacturers.

A DESIRABLE HOME FOR SETTLERS.

Great Opportunity for Investors.

A party of New England business men, after careful examination of different localities in the South, purchased about 20,000 acres of what is conceded to be the richest mineral land in that section (proven by actual assays). It is situated in

DADE COUNTY, GEORGIA,

in close proximity to the rich mines which have been worked for years by ex-Gov. Brown. Beautifully located in the Tennessee Valley, on high ground, with pure water, excellent opportunity for drainage and climate which is simply perfect, we have natural advantages possessed by few cities in the country.

TRANSPORTATION.—The Alabama Great Southern Railroad, a link of the Queen & Crescent Route, runs directly through the city site; the Nashville & Chattanooga Railroad cuts across the northern extremity of the property, and two other railroads have already been surveyed which connect the city with other trunk lines. This property is located within two miles of the Tennessee River, which is now navigable from Chattanooga to the Gulf.

MINERALS.—Coal and Iron are found here upon the same quarter sections of land and in sufficient quantities to supply all the iron industries of New England.

TIMBER.—Stone for building purposes and Clay for fire brick are here in inexhaustible quantities, and there is everything necessary to build and support a city of great size.

OUR POLICY.—Manufacturers wishing to avail themselves of these natural advantages will find this an excellent location, and the company will deal with them most

liberally. There is no place that offers greater inducements or better prospects to careful investors.

CAPITAL STOCK \$5,000,000, divided into 50,000 shares of \$100 each; of this amount 24,000 shares are offered for sale at \$25 per share.

* CITY LOTS. *

CITY LOTS WILL BE
**Sold at Public Auction at New England City
on Tuesday, 15th Day April next.**

An Excursion Train will leave Boston on the 12th of April. Reduced Rates.

Ex-Gov. ROSWELL FARNHAM, President.

GEORGE M. GLAZIER, 1st Vice-President.

ISAAC J. BROWN, Secretary and Treasurer.

DIRECTORS:

HON. ROSWELL FARNHAM, President, ex-Gov. of Vermont.	ALONZO F. PIKE, Pike Station, N. H.
GEORGE M. GLAZIER, 1st Vice-President, Boston.	BENJAMIN F. DUTTON, Boston.
HERBERT L. PERRY, 2d Vice-President, Boston.	FRANK B. PRATT, Boston.
ISAAC J. BROWN, Secretary and Treasurer, Boston.	THOMAS J. LUMPKIN, Trenton, Ga.
GEORGE R. EATON, Lancaster, N. H.	GEORGE J. HALL, Stevenson, Ala.
HENRY C. LIBBEY, Alder Brook, N. H.	HON. FRANK D. CURRIER, Canaan, N. H.
	JOHN FAIR, Jr., Littleton, N. H.

Correspondence invited from all wishing to purchase stock or establish manufacturing enterprises or to purchase city lots.
Address

The New England Company,

No. 1 Beacon Street, Boston,

or at New England City, Dade County, Ga.

SALE OF LOTS

North Chattanooga,

April 30th, May 1st and 2nd.

The property of the

Chattanooga Land, Coal, Iron & R.R. Co.

to be sold at this sale is just across the river, on North side of Chattanooga, a city of 60,000 population, and growing at the rate of 8,000 a year.

Without a bridge or any transfer facilities except ferry boats, North Chattanooga has grown from 300 to about 3,000 population in the past three years. With the convenience of the free county bridge and several street car lines now being built to connect the North side with the city, together with the railroad bridge, the two railroads and belt railroad, all of which will soon be built, this beautiful property will be so near and convenient of access that it will fill up quickly with population, manufacturing and commercial business, and soon embrace a large and important portion of the city.

A fine steel bridge is now being constructed by the county to span the river and connect this property directly with the city, which will make it the nearest, most convenient and desirable addition to the city.

Several street car lines are being built to connect with the city lines and traverse the North Side property by most convenient routes for residents, which will make North Side nearer and much more convenient than many of the populous sections of the city.

Both the Chattanooga Western and the Memphis & Charleston Railroads will be built through North Side; a belt railroad will also be constructed through North Side and along the river.

Three main highways traverse North Side, and will enter the city by the bridge, thus insuring full benefit of the travel and traffic from the country lying north, which will add materially to North Side mercantile business and prosperity.

A railroad bridge over the river will be constructed for the Memphis & Charleston and the Chattanooga Western Railroads.

A large force is at work on the streets, which will be graded and put in good condition by the company. The soil is gravelly, and does not get muddy. Material is abundant for macadam, and the streets will be good. Fine drives traverse the property and surrounding country.

The property to be sold is pretty and desirable. It is high, well drained, mostly well shaded, commands fine views of the river, the city, the mountains, ridges and all the beautiful environs of Chattanooga, and affords lovely sites for homes, excellent business locations and first-class grounds for manufacturing plants, with both river and railroad facilities.

Electric Lights, Water and Gas Works and Telephone Service

will all be supplied as early as possible.

The Company owns 21,000 acres of valuable property in and contiguous to Chattanooga, including the North Side residence, business and manufacturing property, 13,000 acres of coal, a large area of timber, iron, building stone and other minerals, with a deep water river front of eleven (11) miles.

The Company owns 8,000 acres on Walden's Ridge, near Daisy, and also 5,000 acres embracing the beautiful and famous Signal Point, which is noted for the grandeur and scenic beauty of its comprehensive views, and its unsurpassed advantages as a health resort.

New England and English capitalists have taken over \$6,000,000 of the Chattanooga Land, Coal, Iron & Railroad Company's stock.

The capital is in hand, and its expenditure will be judicious but liberal until the plans and purposes of the Company are fully accomplished.

The Company has set apart 1,000 acres of land to be donated as sites for manufacturing enterprises, and a fund of \$150,000 will be apportioned and subscribed for the stock of meritorious manufacturing enterprises.

A Guarantee of \$2,000,000 in Improvements.

The Chattanooga Land, Coal, Iron & Railroad Company guarantees the location on its lands of various enterprises, aggregating a capitalization of Two Million Dollars within five years from date of this sale, and it is confidently believed that the same will be done in half that time.

ANOTHER GUARANTEE.

The Company also guarantees the construction of a railroad bridge across the Tennessee River, over which to operate the Chattanooga Western Railroad to Walden's Ridge, and around and through the Company's property, as well as the railroads entering the city. Thus it will be seen that including the guaranteed improvements on the Company's property, together with the \$400,000 railroad bridge, the railroads, street car lines, &c., the total expenditures will fully reach three million dollars, and this fine property to be sold will be directly and indirectly vastly benefited and enhanced thereby.

SPECIAL RAILROAD RATES

will be arranged on railroads leading to Chattanooga, and as many others as possible. Apply to Depot Agents for information as to schedules and rates. It is advisable to come in time to look over and become familiar with the lots as the sale may be conducted under a tent or shelter.

NO POSTPONEMENT ON ACCOUNT OF WEATHER.

TERMS OF SALE: ONE-FOURTH CASH, remainder one, two and three years with interest at 6 per cent., payable semi-annually.

TO ALL WHO PAY CASH A DISCOUNT OF 4 PER CENT WILL BE ALLOWED.

NOTE!

\$2,000,000.00

**Guaranteed in Improvements
ON COMPANY'S PROPERTY.**

NOTE!

\$3,000,000.00

**GUARANTEED IN
IMPROVEMENTS.**



T.K. EARLE MFG. CO.
Bobbins, Spools, Shuttles,
AND ALL MANUFACTURERS' WOOD SUPPLIES
AND SPECIALTIES IN MILL TRADE.
The GREENE & WOOD MFG. CO.
NEW BEDFORD, MASS.



W. A. RICHARDSON & CO.
MANUFACTURERS OF STANDARD MEASURING
CLOTH FOLDERS AND COTTON WINDERS,
For Print and Dye Works, Bleacheries, Cotton, Gingham, Delaine Mills, Etc.
P. O. Box 504. **WORCESTER, MASS.**



Centrifugal Hydro Extractors.

Three Sizes and Styles of Machines.

Two with Independent Engines, One Run by Belt.

Send for illustrated circular and description.

SCHAUM & UHLINGER,

Successors to W. P. UHLINGER.

Glenwood Avenue and Second Street.



PHILADELPHIA, PA.

THE DENN WARPING

WITH NEW DOUBLE LINKER,

Makes the BEST WARP in use.

SEND FOR CUTS AND PRICES.

Single Linkers Altered to Double Linkers.

GLOBE MACHINE WORKS,
FRANKFORD, PA.



VAN WINKLE GIN & MACHINERY CO.

ATLANTA, GA., and DALLAS, TEX.

MANUFACTURERS OF



COTTON GINS, FEEDERS,

CONDENSERS AND PRESSES,

COTTON-SEED OIL MILLS,

SHAFTING, PULLEYS, WIND MILLS, TANKS, PUMPS, Etc.



The BEST COTTON-SEED OIL PRESS IN THE MARKET

Boxes Made Entirely
of Steel.

CAPACITY:

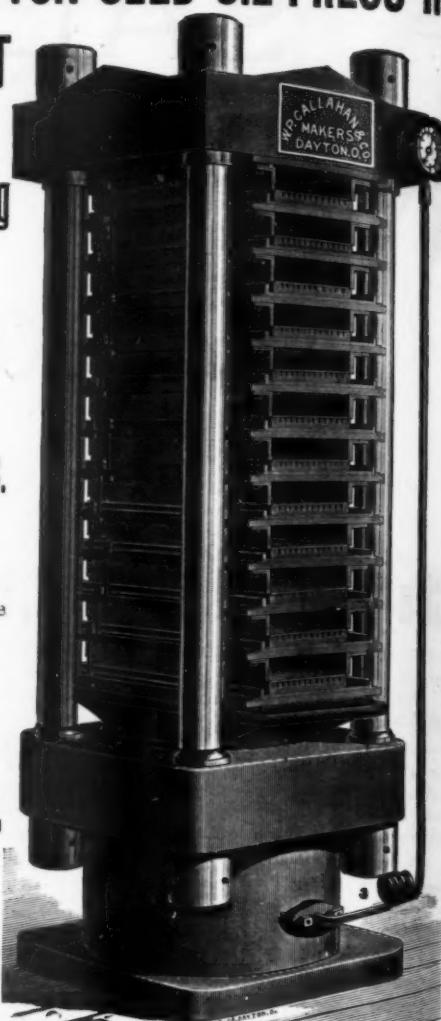
12 Tons in 24 Hours.

Parties contemplating the
erection of Cotton-Seed
Mills should
address

W. P. Callahan & Co.

DAYTON,

OHIO

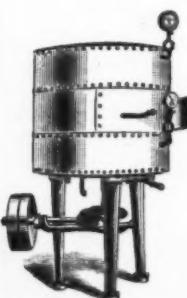


OIL MILL MACHINERY.

THE G. H. BUSHNELL CO.

THOMPSONVILLE, CONN.

MANUFACTURERS OF
Improved Cushing Rolls, Meal Heaters,
Cake Formers, Hydraulic Presses,
Belt-Driven and Steam Hy-
draulic Pumps, Etc.



Parties having in contemplation the building or refitting of Oil
Mills will do well to send for our circulars and prices.

IRON CLAD PAINT CO., Cleveland, O.

Factory, 75 & 77 Central Way. JAMES WADE, Sec. & Treas., 3 Case Bldg. ORDER DIRECT FROM THE
Iron Clad Paint Co.



TRADE
IRON-CLAD PAINT.

Trade Mark Patented Pain Presented.

USED BY NEARLY ALL
THE RAILROADS.

Chattanooga Paint Company. CHATTANOOGA, TENN.

Manufacturers of the

BEST OXIDE OF IRON PAINT MADE IN THE UNITED STATES.

Over 18,000 tons made since 1880. 3,000 tons made in 1888. Over 500 certificates
regarding its qualities. Either dry or mixed ready for use.

SEND FOR PRICES DELIVERED AT POINT OF DESTINATION



J.W. SKINKLE, President.
J. KOENIGSBERG, Secy.
LEO. RASSIEUR, Vice Pres't.

**THE CONSOLIDATED
ICE MACHINE CO.**
MANUFACTURERS OF
**ICE MAKING
AND
REFRIGERATING MACHINERY.**
BRANCH OFFICES
N° 210 EAST 54TH ST.
NEW YORK CITY.
WORKS &
PRINCIPAL OFFICES
WEST 18TH ST. VIADUCT
CHICAGO ILL.

* 246 *

MACHINES

IN OPERATION

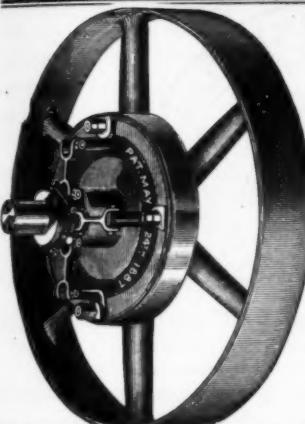
Making Ice—Refrigerating, Breweries, Packing Houses, Cold Storage Houses, Oil Refineries, Creameries, Hotels, &c.

BUY THE BEST AND SAVE MONEY.

All machines built by us are made to gauge and template. Highest economy secured. Best results obtained. Machines in steady operation for more than ten years.

NO FAILURES.

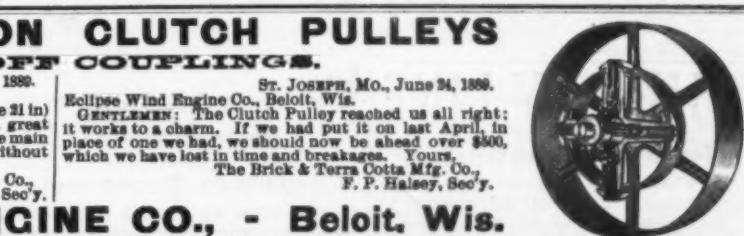
* ICE MACHINES. *



The MOORE & WHITE CO.
1312 Buttonwood St., PHILADELPHIA, PA.
Friction Clutches, *
* Cut-Off Couplings, &c.
Paper Mill
Machinery, &c.

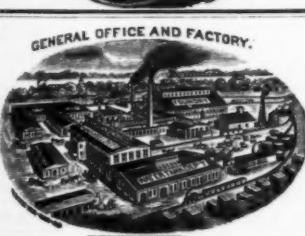
L. H. BECK, President.
INO. CAREY, Secy. & Treas.
W. COOK, Superintendent.
ATLANTA MACHINE WORKS,
MANUFACTURERS OF
The Cook Improved Absorption Ice Machine
Boilers, Tanks, Smoke Stacks, Shafting, Hangers, Pulleys,
Saw Mills, Mill Gearing.
GOLD MINING AND STONE-WORKING MACHINERY.
ATLANTA, GA.

HILL
Clutch Works,
CLEVELAND, OHIO.
NEW YORK:
18 CORTLANDT STREET.
CHICAGO:
28 S. Canal Street. 300 Kasota Bidg.
KANSAS CITY, MO.:
1221 Union Avenue.
POWER PLANTS
Designed, Erected and Furnished.
Send for new Catalogue, Power Transmission Machinery.



**ECLIPSE FRICITION CLUTCH PULLEYS
AND CUT-OFF COUPLINGS.**

Seattle, Washington Ter., 5 26, 1889.
Eclipse Wind Engine Co., Beloit, Wis.
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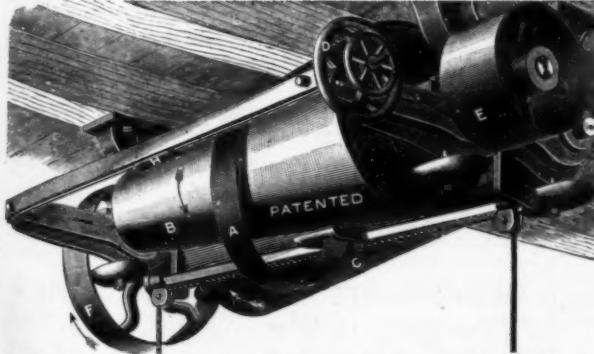
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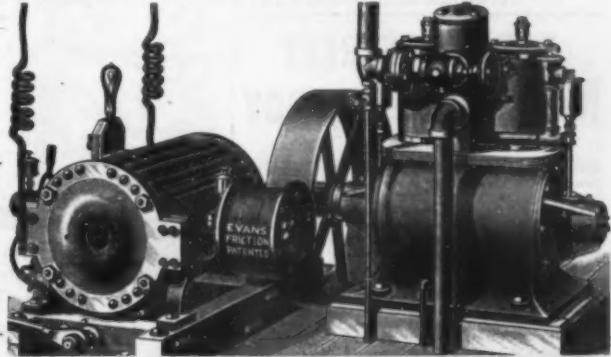
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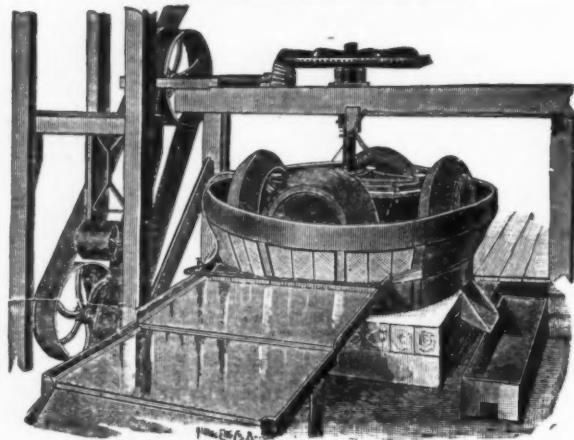
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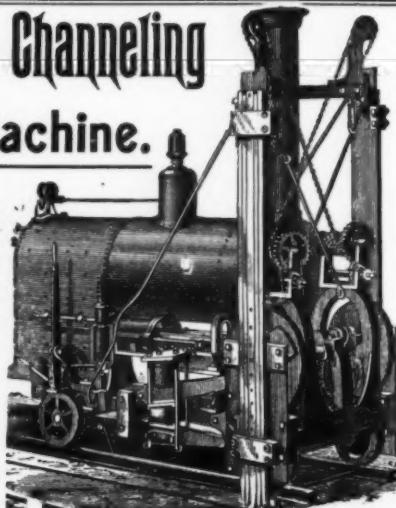
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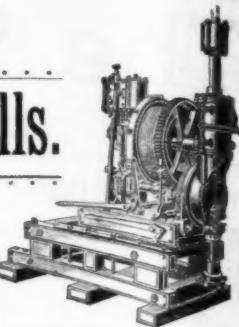
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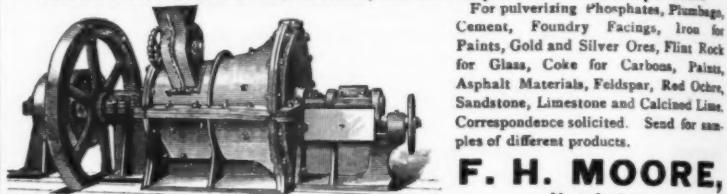
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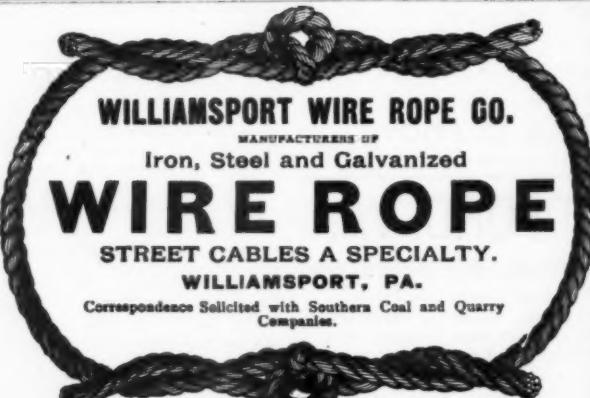
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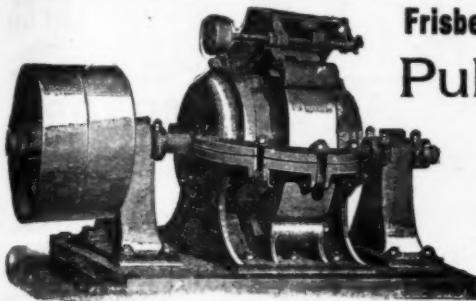
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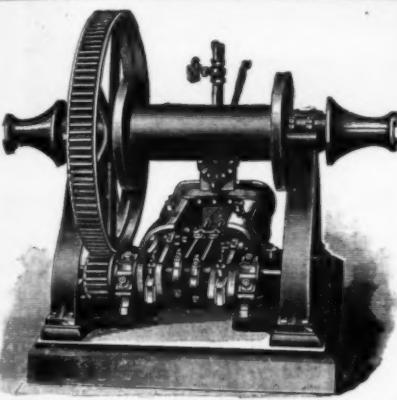


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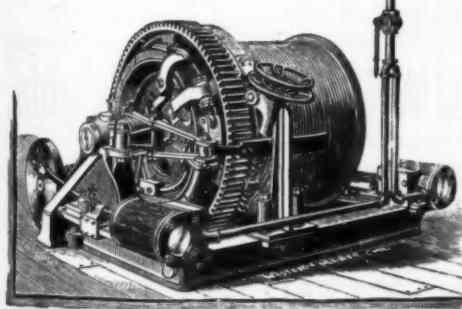
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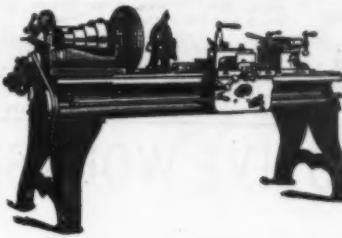
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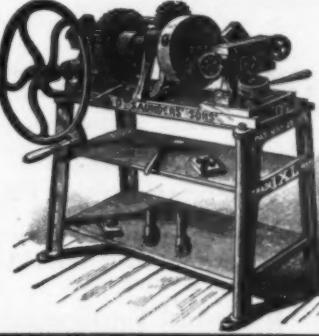
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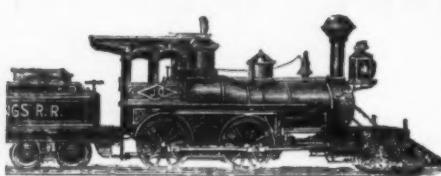
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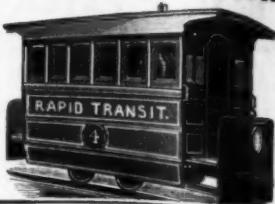
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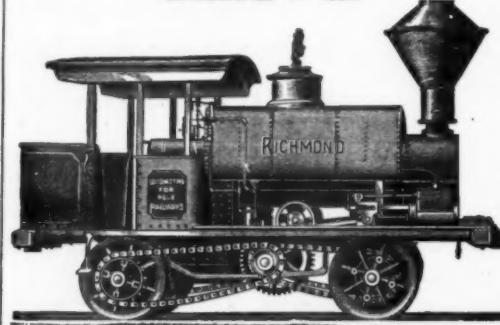
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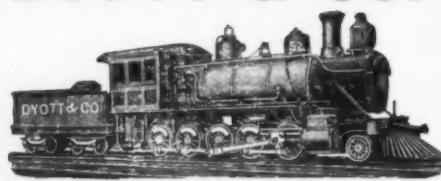
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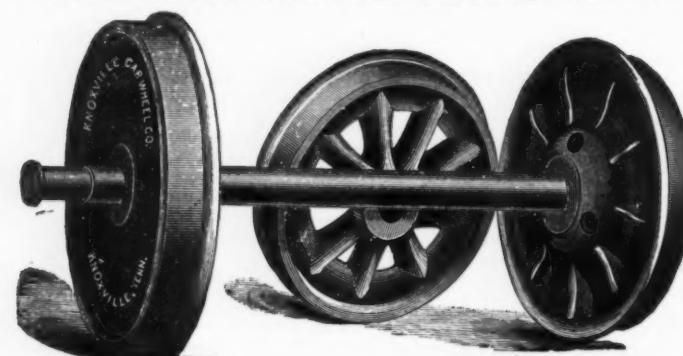
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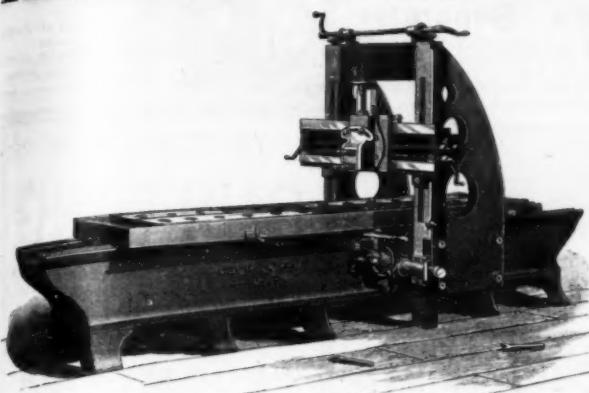
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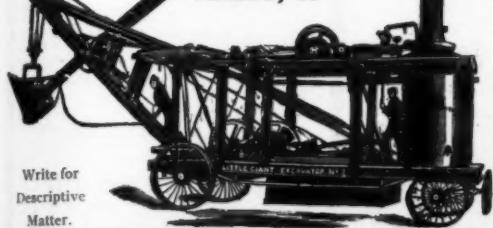
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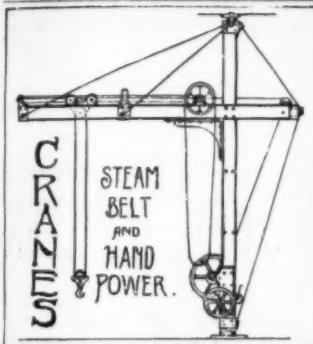
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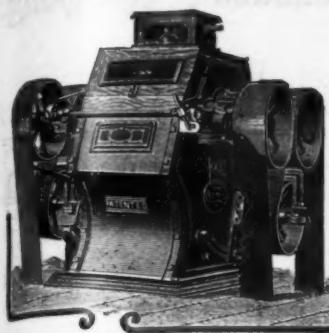
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Thanking you for the prompt and efficient manner in which you furnished my machinery in so short a time, after so great a loss and damage by fire burning your works, and with the best of wishes I remain,

PETER SNYDER.

For full particulars regarding the best FLOUR OR CORN MILL MACHINERY, address



THE CASE MANUFACTURING CO., Columbus, Ohio.

Hoop Cutting, Dressing and Coiling Machinery.

In the hoop cutter shown in the illustration the knives are ground on a 36 inch common grindstone.

The plank being placed on solid horizontal bed and fed straight to knife, skilled labor is not required to operate machine. The knife tilts to give desired bevel to the hoop, and being made in three interchangeable sections, either section can be

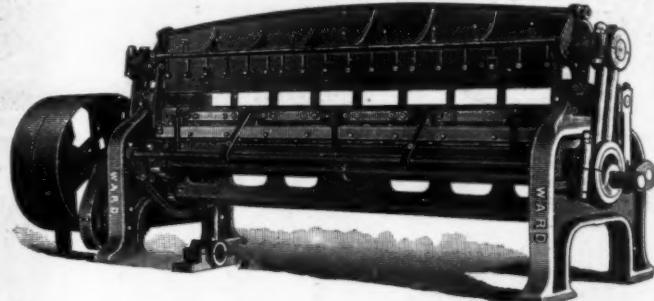


FIG. 1.—WARD'S HOOP CUTTER.

renewed at one-third the cost of an entire knife.

In working the iron side of the knife is next to the plank, so, as the wear is on that side, the steel is not wasted in refacing.

The knife is 8 inches wide and straight, and there is 2½ inches of good wearing steel to work on. The knife cuts on wood arranged to be raised as it wears. There are 4 inches of hand room under the plank and a good stop underneath to save operator's thumb from knife. The fact that the plank lies solid prevents slivering the lower edge, which always occurs, more or less, when the plank is rocked or tilted.

The eccentric straps are lined with genu-

is 16,000 to 20,000, and of the single-hoop planer 10,000 hoops in 10 hours.

This machine is also made as a head-lining cutter, using for that purpose short or waste hoops or staves. In this case the machine is much narrower, the cutter-head being overhung. All gearing on outside of machine is well protected by cast iron hoods.

The improved coiler shown will coil 10½-inch hoops, 1¼ to 2 inches in width in a coil, runs lighter than the old standard coilers

Haunted Bell"—VIII., by Prof. James K. Hosmer; "Tarry at Home Travel," by Edward E. Hale, D. D.; "New England and the West;" "Editor's Table."

SPINNERS who are looking for the best results will find it to their interest to investigate and test the qualities of the burnished rings made by the Whitinsville Spinning Ring Co., who have perfected and patented a very ingenious device, by means



of which rings can be given a metallic burnish like that produced by the traveler. The manufacturers say that no one, at the present high rate of speeds, can afford to use any other ring, and that they will not do so when once convinced of the advantages of these rings.

Trial tests have been and are still being

No. 29 warp; Whiting gravity spindle making 9,100 revolutions per minute; 1½ Whitinsville Spinning Ring Co., burnished and unburnished rings, 160 of each.

The test was made in the worst possible weather for spinning, and for the purpose of showing the results at the most critical time for new rings. On the burnished rings, the standard weight of travelers was used. That is, the weight used for the same number of yarn in other parts of the room. Weight of traveler, 10 equal 6 grains. On the unburnished rings, 10 travelers equal 5 grains. Up to the time when the first traveler came off on the burnished rings, which was just 20 hours, 430 travelers had been used on the unburnished rings. No doubt the same, or nearly the same, results would be obtained in the same condition of the atmosphere, in any mill.

This statement is made to show what the effect may be on the spinners as well as on the work. No spinner wants to put in new rings in dog days. The trouble and poor work occasioned by putting in new rings is overcome by using the burnished ring produced by this patent process. No tests

and dispenses with the use of the rubber bumper; the shock of the weight in falling is sustained by a 2-inch plank placed under the machine for this purpose and for the machine to stand on. For further particulars address Frontier Iron & Brass Works, Detroit, Mich.

THE New England Magazine for April has the following table of contents: "William Ewart Gladstone," by William Clarke; "The United States Life-Saving Service," by William Wallace Johnson; "Plain Words on the Indian Question," by Elaine Goodale; "The Astor Library," by Frederick K. Saunders; "Jonathan Edwards,"

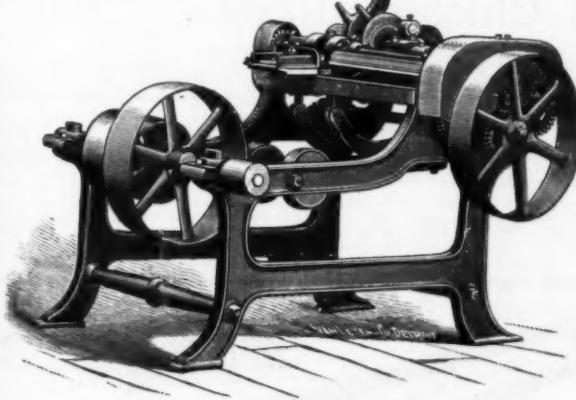


FIG. 2.—WARD'S HOOP PLANER.

in babbitt metal, and the hoop gauges are adjustable with brass gibbs behind them.

A separator or divider, "O," drops the hoops alternately in separate piles, so by changing ends of one pile all are right for the planer.

The hoop planer shown in illustration has upper and lower (separate) "live" feed rolls. The capacity of the two-hoop planer

by Joseph H. Crooker; "At Carlyle's Grave," by Zitella Cocke; "The Old West Church," by Emily Talbot; "My Faith," by Arthur Graves Canfield; "Beyond The Bridge," by Dora Reed Goodale; "Thomas B. Reed," by W. H. Brownson; "Compensation," by Richard E. Barton; "Amelia B. Edwards," by Sallie Joy White; "Egypt at Home," by W. C. Winslow, D. D.; "The



FIG. 3.—WARD'S HOOP COILER.

made in various mills, and in all cases they have done more than is claimed for them. Less travelers are used; less waste is made; better quality of yarn is secured, and spinners are able to keep up their usual number of sides or ends without the hard work which new unburnished rings always cause. A test was made recently on two frames of 160 spindles each; time run, 20 hours;

that have been made give less than 50 per cent. saved in travelers the first ten days by using burnished rings, and actual tests prove that there is a large saving for several months. Manufacturers who have used burnished rings are satisfied that they are doing all and more than is claimed for them. Further, it seems reasonable to say that the life of the ring will be greater.

The Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, April 9, 1890.

During the latter part of last week a large amount of new business rather unexpectedly presented itself to crude iron makers East, West and South. Whether this is the beginning of an upward movement in prices it is too soon yet to say. Quotations, according to latest advices, are still at \$17, \$18 and \$19 for standard forge and No. 2 and No. 1 foundry, respectively, in Northern markets, but the expectation entertained on all sides is that when buyers cover the spring and summer requirements, or rather while they are covering, makers will push prices up 25 to 50 cents. The probabilities, however, are that they will not have the opportunity of doing so, except upon the large number of small buyers who are in the habit of waiting until the opportunity for buying at low prices has slipped through their fingers. The chief activity of the past few days has been in foundry, although forge iron has not been at all neglected. Good orders have been received at New York, Boston and Pittsburgh, and the presumption is that this week will bring in heavy orders, at least to cover urgent requirements, but this is simply an opinion. By another week it will be possible to make definite statements as to the magnitude of the present demand. A great deal of forge iron is wanted in New York, Pennsylvania and Ohio, the yards of most mills being rather bare. Only a few users made contracts running into the summer; those who took the risk of ordering so far ahead now see their mistake. All the foundries throughout the country are busy; the rolling mills are all crowded with work for the present, and there is no sound reason for believing that there will be any cessation of activity in any department of the iron and steel trade.

The Western markets show symptoms of renewed vitality. At Chicago prices have already been advanced. Lake Superior charcoal has sold at \$21.50; Southern No. 1 coke at \$16.50; Alabama car-wheel iron, \$24; Bessemer, \$21.50. In all Western markets there is an improving demand for bar iron, sheet and galvanized, merchant steel and hardware. Nails are dull, owing to the fluctuations in prices which have recently been disturbing those markets. Large quantities of nails will be purchased just as soon as buyers can feel assured that they are running no risk.

Louisville markets are fairly active, and there are indications of a sharp improvement at an early date. Throughout the South the drop in prices has caused a good deal of disappointment and some unfounded apprehension as to the future course of Southern irons, but our latest advices are to the effect that a reaction is already at work. Between 25 and 30 new furnaces will be blowing before the season is out.

Throughout Ohio and Western Pennsylvania a good deal of new business has lately been booked. At Pittsburgh neutral gray forge iron is quoted at \$16 to \$16.50; No. 1 foundry, \$18.50; Bessemer, \$18 to 19.

Furnace men everywhere are complaining that the fluctuations in values are doing them great injury and intimidating buyers.

The structural and plate-iron makers report active inquiry, and brokers representing makers talk with great confidence as to the future of that branch of trade. In wrought-iron pipe there is an increasing business. Steel billets and slabs are very low, and large buyers are still waiting. Prices have certainly reached rock bottom, and any change must be for the better.

The agricultural implement makers are all busy, and the requirements in this line for the Northwest and the South are very promising.

The extreme dullness of the past few

weeks must soon disappear and a general activity will set in which will improve prices. One or two large contracts have recently been placed for steel rails, but several large buyers are now in the market, and if their inquiries result in business, by the middle of the month makers will have new orders on their books for between 50,000 and 60,000 tons. There is a more satisfactory condition of things in the steel rail trade than is generally supposed to exist. A great deal of railway building is projected, and with heavy and improving traffic and favorable commercial and financial conditions a large proportion of the projected mileage will be undertaken by June or July.

Old rails are sluggish in all markets. Cotton ties are active. Merchant iron is being freely bought by users in both Eastern and Western markets at about schedule prices.

HARDWARE.

The market continues without features of especial interest. Most of the leading jobbing centers report the volume of trade very light, but thus far there have been but few changes in prices of anything beyond raw material. Some of the manufacturers who have caught up with their orders are displaying more or less anxiety for new business, but are not cutting to obtain it, and will not do so unless forced to it by continual stagnation, which we trust will not prevail beyond the near future. On the first instant the American Screw Co. issued a new discount sheet, showing decline of 10 per cent. on machine screws and wire nails, other goods remaining unchanged. There is a slight weakness in the screw market, caused by the efforts of outside manufacturers to market their product, but the necessary steps have been taken to regulate these quotations, hence no decided break is apprehended.

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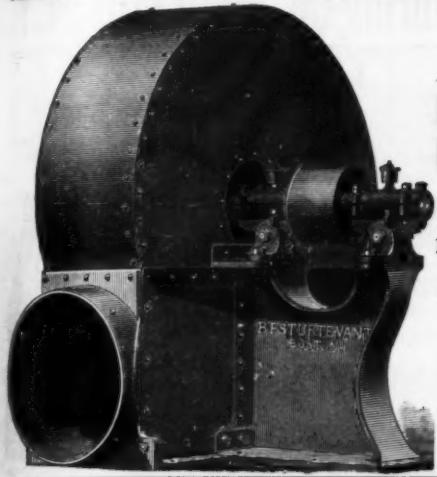
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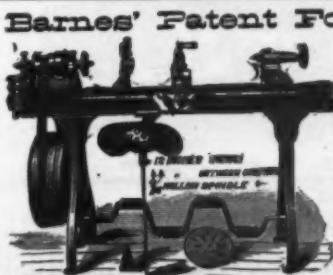
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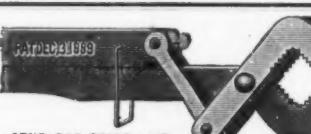
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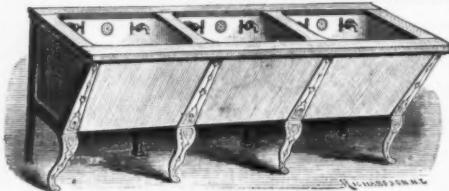
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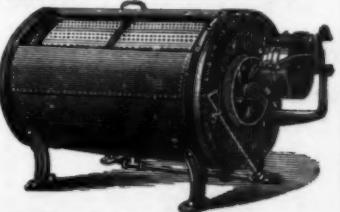
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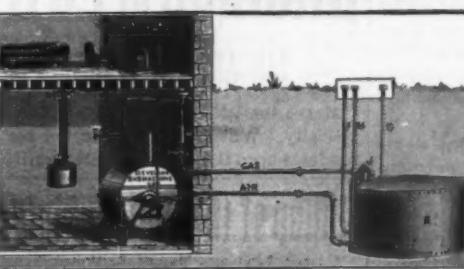
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Eastern Lumber Markets.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

NEW YORK, April 8, 1890.

Notwithstanding the extraordinary success already met with in pushing the sale

yellow pine in Northern markets, an effort is to be made to put the business in still better shape, or rather, into a more thoroughly organized condition. This intention has been strengthened by the great building activity of the past year, and the prospects of still greater activity this year. The movement will be participated in, not only by the New York, but by the Baltimore and Georgia lumber people, and the outcome, it is said, will be to lift the entire industry upon higher basis, and extend the trade into still more remote markets. This is not at all to be wondered at; in fact, the only wonder is that the attempt was not made sooner. It may be that no greatly increased amount of lumber will be sold under the reorganization, but the business will be done in a more regular and satisfactory way.

Yellow pine, random lots, are quoted today at \$21.50; car orders, \$22.00@23.00; heart-faced boards, \$20.50@21.00; sidings, \$13.00@14.50; floorings, \$20.50@22.00; stepping, \$26.00@28.00. Quotations for North Carolina pine, dressed, in car-load lots, \$22.50 for No. 1 one-inch flooring; rough stuff by water has sold at \$21.00 for No. 1 one-inch stock. A good deal of stuff has been contracted for during the past week or 10 days, and we learn that arrangements are now about consummated for the delivery of a great deal of stuff during the next 90 days. Building requirements will be heavy all season, and wholesalers are now satisfied that there will be no material fluctuations in prices, and, therefore, are willing to talk business. The quotations recently named in response to inquiries for large lots of North Carolina pine, show that there is a marked difference between it and competing Northern products, and the attention of builders and contractors is consequently being more directed to it. Steps are being taken to put this branch of the Southern lumber trade also upon a broader basis, and wholesalers here and in the South are now about closing arrangements which will work to the advantage of the parties immediately concerned, and also the general lumber-buying public. Our advices from North Carolina mills are to the effect that all are busy and oversold, prices firm, and prospects for the summer better than they have ever been in that State.

Holders of hemlock are not seeking trade as actively as they are accustomed to do at this season, for the reason that lumber is a little higher, and likely to advance still farther. Logs are scarce, and some of the mills will not have much business. The demand this year will be large, and prices have been advanced in some instances to \$12.50 to \$13 for joist. Boards are selling at \$13 to \$13.50, and it is said that \$14 will be asked before the end of the month. Spruce is also scarce and prices are advancing, as the supply will not be much more than half the usual amount.

White pine is commanding strong prices and a fair sale is reported from retail yards. The wholesalers have not made any effort to sell in a large way simply because, in the first place, there is a good deal of competition to be expected in the West, and secondly, other woods are being crowded in where white pine has heretofore been almost exclusively used.

In Philadelphia there is a fairly active demand for all kinds of lumber, but particularly for hardwoods; flooring and ceiling material are active. Several contracts have recently been placed for large bills, and the car builders of Pennsylvania have bought a great deal of stuff, the effect of which has been to harden prices not only

in lumber, but in the kinds of iron entering into car construction.

What has been said concerning hardwoods during the past week or two could as well be repeated to-day. Cherry is scarce and high. A great deal of walnut is selling and at full prices. The handlers of mahogany report a great deal of inquiry from contractors and builders, as a large amount of church and bank-building work is to be done this season.

Birch is coming into more general use; beech is quiet; the stock of maple is increasing. A good deal of poplar has been arriving lately, and, so far as we can learn, business is being done at firm prices; this is largely due to the fact that the managers in the West are holding their ground. Quarter sawed oak is in very good demand, and shipments are being hurried forward. The manufacturers of oak are making the best of these exceptional conditions, and running their mills full time to take advantage of the high prices. Plain oak is in abundant supply.

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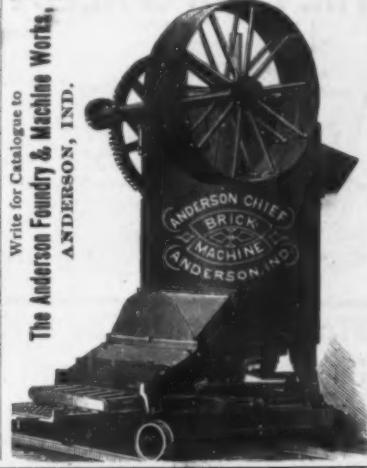
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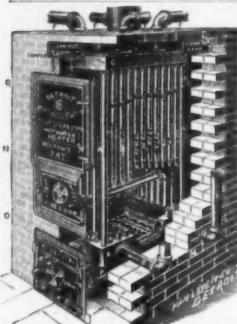
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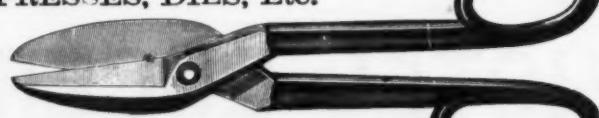
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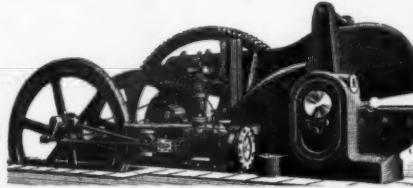
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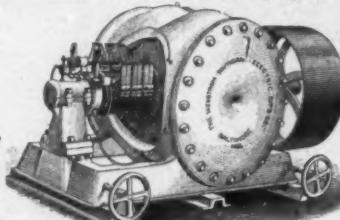
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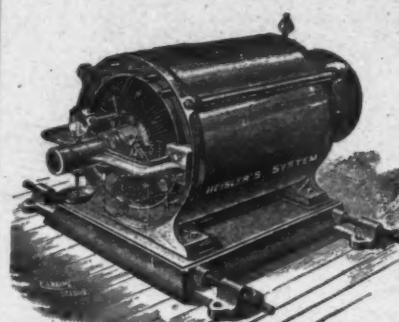
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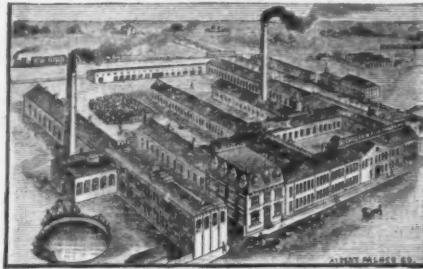
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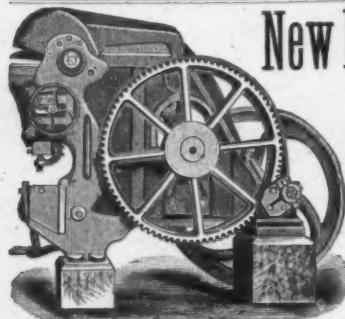
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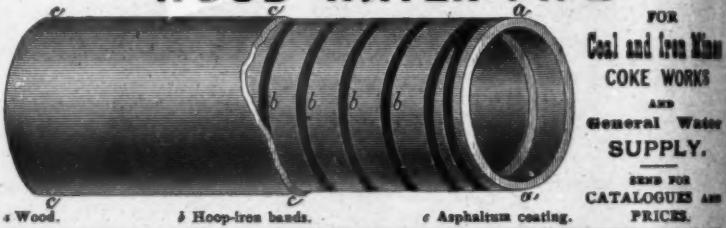
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